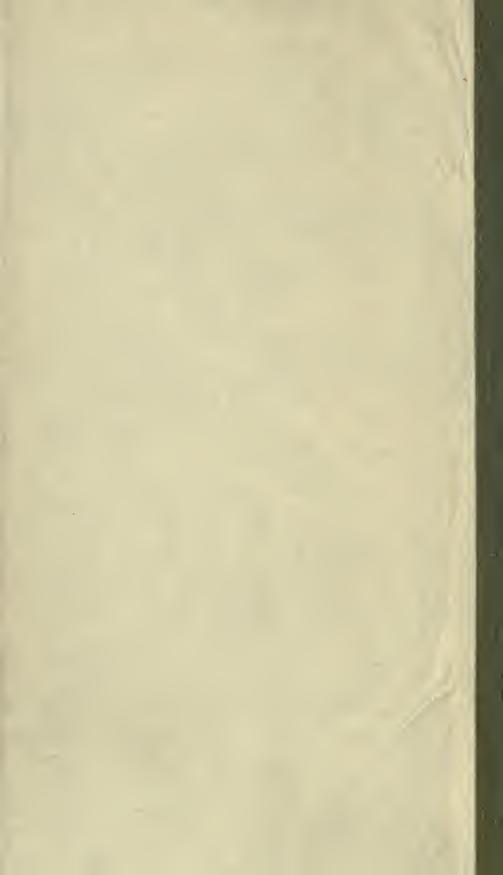
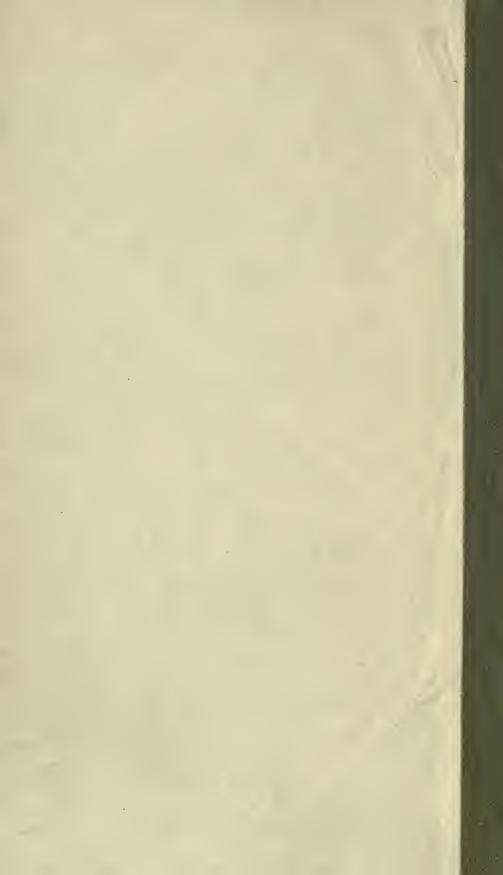
Untvof Teronie Lierary









Digitized by the Internet Archive in 2008 with funding from Microsoft Corporation





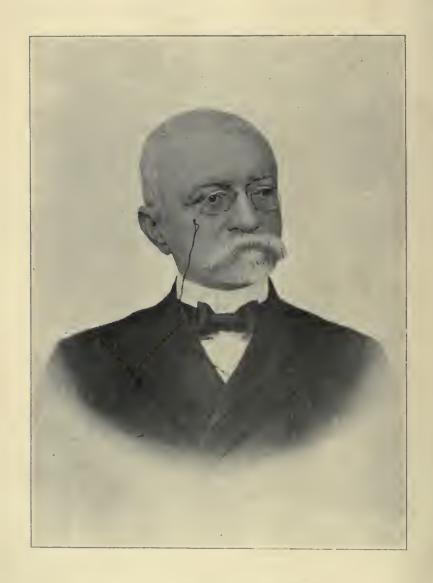
The Brazil of To-day

WORKS OF THE SAME AUTHOR

FOR SALE AT LAEMMER'T & Co's, BOOKSTORE

RIO-DE-JANEIRO, BRAZIL

- O Dr. Rodrigues Lima a sua administracão (Propaganda republicana).
 Bahia. Typographia Wifke Picard & G. 1896.
 1 volume
 com 195 paginas.
- O Problema Naval. Rio de Janeiro. Typographia da Estatistica. 1889
 1 volume de 374-xxv paginas. Com um prefacio de Senador Ruy Barbosa.
- Do Rio a Buenos Aires. (Episodios e impressão de uma viagem ao Prata). Rio de Janeiro. 1901. Imprensa Nacional. 1 grosso volume ornado com cerca de 200 esplendidas gravuras.
- Algumas Paginas. Questões sobre defesa publica, polemica, etc. Bahia. 1900. Typ. do Correio de Noticias. — 1 volume, em optimo papel, com 220 paginas.



HIS EXCELLENCY OF AFFONSO PENNA PRESIDENT OF THE BRAZILIAN REPUBLIC

ARTHUR DIAS

THE

BRAZIL OF TO-DAY

-econom

ISCOLLULATION TO THE PROPERTY OF THE PROPERTY

A book of Commercial, Political and Geographical Information on Brazil

Impressions of Voyage, Descriptive and Picturesque data about the Principal Cities

Prominent men and Leading Events of our Days

with Illustrations and Statistics



LANNEAU & DESPRET

PRINTERS

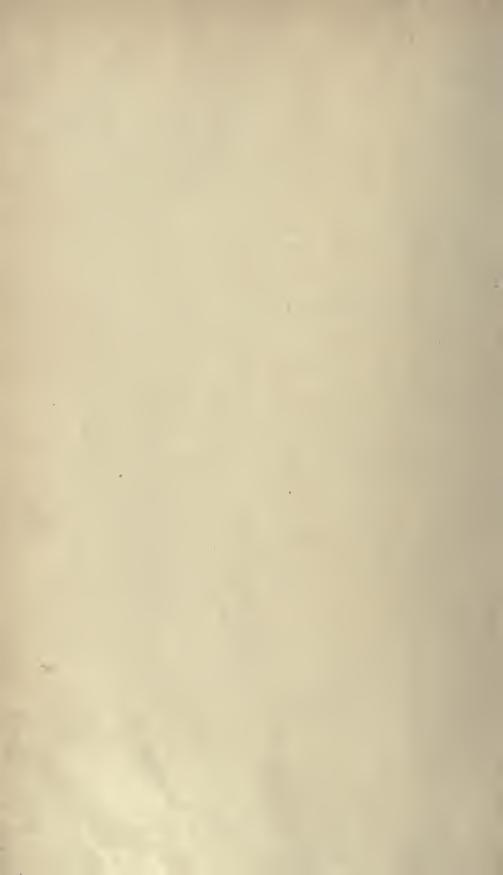
NIVELLES (BELGIUM)

320635

is without the second of the s

THE BRAZIL OF TO-DAY

- I. Introduction. Politics. Administration. Federal Services.
- II. Sciences. Fine Arts. Litterature. Progress.



The Brazil of To-day

This great country, already one of the largest in the world when it made its appearance as an independent nation at the beginning of the last century, has since added to its map several regions, both at the North and South, not by means of military conquests, but through the decisions of international judges. At the beginning of this century there were only four flags unfurling their colors over communities larger than the Brazilian Republic and they were: England, which is the largest empire of the world, with its eolonies and possessions all over; Russia, with its Asiatic annexations; the immense China which we may compare with a well, as it seems to grow at the proportion other nations take away from it some territory; and the United States with its four million of square miles much enlarged by the victories won in the war against Spain. Of all these great countries, however, none has territorial homogeneity, and what is still more important, none has the homogeneity of its race as Brazil has.

That enormons English empire is by itself a map of peoples without any other ties but its powerful instruments of administration, so that, what we admire it for, is not its tendency towards desaggregation nearly exposing itself by the independence of the Australian federation, but for its aggremiation, as it exists to-day, conglomerating artificially ethnic dispositions, habits and customs, languages and social inclinations of impossible assimilation.

The massive Russia is an aggravation of the English heterogeneity we referred to: is like the English empire but more crowded with antagonistic races — the Slavonie, Polish, Laplanders, Finlanders, Estonians, Armenians, Siberians, Parminiens and Georgians, Tartars and Tehondians, in short, « une monstruense et discordante agglomération de peuples, » as a certain geographer put it.

About China, empire of Tartars and Mongolians, it is enough to say that only half of its enormous population is really Chinese.

The United States, as a nationality, is the least heterogeneous of the four. It encloses within its boundary lines English Continental States, French States, Mexican States, without speaking of the Spanish-Philippine ones added after the last war.

In a word: Brazil is the only one of the gigantic countries inhabited by a single nation. The Brazilians to counter balance the many incriminations justified by their inherited faults, owe to Portugal the inestimable benefit of the unity of the race, unity maintained and strengthened through the evolution of the nationality, mainly by means of these two factors: language and religion.

The religion adopted by the population of the country generally, without either fanaticism or intolerance, but rather with the legal consecration of the freedom of creeds, is one and the same in all the twenty States of the Republic. The small number of non-Roman-Catholic churches, is not sufficient to alter faith in general. It is just like the case of that law of the impenetrability, in physics: there is no room.

The language is, in our opinion, still a more valuable factor of the national cohesion. Any one travelling in Brazil, as I have done, from North to South, and from the cosmopolitan cities of the sea shore, with a high degree of European culture, to the most obscure villages of the interior, will not hear anything else but the same latin voice, harmonious and tuneful, expressing the same feelings, their folk lore and traditions, the same thoughts. the same philosophy, the same ideals, in short, by the productions of their poets, their journalists, their orators, any one will understand most plainly the truth of that Döhne's judgment saying: « the language is the only characteristic of a nation which cannot be adulterated. »

This does not mean that the language spoken to-day in the vast territory of Brazil is strictly the language of Portugal and its philologers. — To say that would be not to understand, in its quantity and in its variety, the contingent with which the messoneist action and the collaboration of the aboriginal dialects intervene as irresistible modifiers and regulators, in the transfiguration of the prosody, of the syntax and even of the lexicology, of the vocabulary, in the difference of the speaking of the two peoples. The mother tongue was providentially sown in every corner of the Brazilian territory and there was preserved through all the alternatives of the history of Brazil, in spite of the presence of the diverse elements that appeared in the foundation of several cities, by Spaniards, Frenchmen,

Dutchmen, Germans and Italians, either in the colonial period, or even after the political independence of Brazil.

This double tie arranged in such a way the unity and the identity of the Brazilian people, that, political superveniences which were great modifiers as the one that in 1822, by the monarchy, changed the « Capitanias », into « provincias », and the one that in 1889, by the republic, changed the « provincias » into federated states do not succeed in shaking in the least the joints of the body of relations and interdependences, which transform the political-social life of each of the States into the life of only one national organism perfectly indivisible. The phenomenon, which is observed, by all foreigners who visit Brazil, with astonishment, has caused no little amount of envy on the part of the neighbors of Brazil.

With such proportions, occupying an area of over one half of the continent, Brazil presents itself as a true collossus, if not comparing it with the territory of European countries, at least comparing it with the nations of the same continent.

The most curious conjunction, yet, and the one presenting itself as easual in its most surprising consequences of the evolutional syneretism of the race, is that, to that physionomic-social unity corresponds, at the bottom, a most varied ethnic amalgam, a human compound, notably mixed, in which there interfered with uneven coefficients the European latin-born, the Neerland European, the African, the Autochtone, already mixed by the fusion of diverse tribes and nations.

The intermingling of these elements, for a long time elaborated, gave in result the alloyage of to-day, in which took part also the Polish, Teutonic and Latin of the peninsula, giving to the Brazilian population of our days the character of a race of transition, in a continuous process of purifying itself by the predominance of the white types.

That community received, with the physionomic characteristic of its ancestors, its psychic inheritance equally mixed in the fusion of a sole type which is none of them being at the same time all of them: the blind and solid virility of the Luso-Iberic, the imagination and enduring resistence of the indigenes, with the sentimentality of the African and his affective capacity,

Theophilo Braza, a Portuguese writer of renown, wrote the following paragraph in the introduction of a book *Contos Populares* by Sylvio Romero, a Brazilian litterary man, considered the best litterary critic of the country:

« The co-operation of the three human races, the ariea by its

speculative capacity, the negro one by its affective superiority and the indigene by its active tendencies, unified in the social fact of the Brazilian nationality makes us to augur what will be the extraordinary greatness of the South American civilisation in which Brazil will predominate »; and that greatness we can already feel it in the figures with which the Brazilian nation increases its numerical total so rapidly.

In 1776 the number of inhabitants was estimated at 1.900.000, but at the time of the independence of the country it was already 3.000.000; in 1856 there were 8.000.000 in round figures, though it had separated itself from that colossus called *Cisplatina Province*, as it was the only strange part of it under the view point of race and language, history and customs; in a short while, after the Paraguayan war it was 11.000.000, and the census of 1890 showed officially 14.333.915 though did not comprize quite a number of cities and villages of the interior.

To-day the population is estimated at 20.000.000, of which more than half are whites; the other half is subdivided into a mixed breed with an indefinite number of degrees of crossing by descendants of Africans, in smaller number, and by some Indian tribes.

New arrivals of Europeans, principally latin ones, (Italians, Portuguese and Spaniards) as well as Anglo-Saxons, Polish and Syrians, in small numbers land in Brazil every year to share the benefits of this beautiful and happy country, collaborating at the same time in the rapid growth of the nation, which, some day, will have as France, Germany and Belgium, all its territory recognized and exploited. It will be then that, upon these deserts of the West, upon these melaneholic fields and mountains, the noise will be heard of the active and struggling communities and the music of civilisation marching with its industries and carnest life; and in this future age, instead of 18 or 20.000.000 inhabitants speaking the language of the Brazilian writers and poets there will 400.000.000 or 500.000.000 doing it and they will be there ready to defend the flag that past generations have delivered to them spotless, beloved and powerful.

What Brazilians have done with that large territory in their possession, is not all they aspired for in their patriotic dreams. No other people has done more, if are to consider the small number of its population, the conditions of climate and other drawbacks. Its population is and has been unsufficient to exploit its vast territory. After the national independence, everything that there was possible of assimilating from the conquests of sciences, arts and industries, is well in evidence in the administrative organization of the nation,

in the liberal and humane principles of the Brazilian codes, in the activity of the commerce and newly born industries, in the railroads, schools, churches, libraries, newspapers and many other evidences of progress. Many European countries have been excelled in the proportion of those exteriorities of the evolutive capacity of peoples.

The eapital of the Republic, the beautiful city of Rio de Janeiro, which represents the pride and the hopes of the Brazilians, by its gigantic proportions, though it may not be eelebrated by its buildings and monuments it is one of the largest in territory and even in population. The improvements it is now undergoing, opening avenues, bay-side-drives, constructing public buildings, theatres and beautifying its squares and parks give the assurance that Rio will shortly be one of the best cities in this continent, no doubt, the first in South America. The Harbor Works and the Avenida Central now underway, the latter being nearly completed both began by the administration of President Rodrigues Alves and Dr. Lauro Muller, Secretary of Public Works are two magnificent improvements which are eausing no tittle amount of envy to the Argentines, always jealous of the Brazilians.

Before going any further we will now speak of the administration of the country. Since 1889 when the Republic was proclaimed, the 20 Provinces began to be known as *States*, with full liberty to govern themselves both economically and politically at their own free will, of course, under the surveillance of the Federal Government. Among other things they can elect their Governors, vote their taxes and use their revenue in the best manner they deem it wise. Besides this they received all grants of land, the largest portion of national grounds, mines, the power arbitrating the legislature on railroads and rivers navigation, once they are within the boundary lines of the State, and other advantages.

If some of the States have made some mistakes of administration, the majority have been administrated with great wisdom and prospering thereby.

We must say that the 20 States were not by any means on the same level as to their capacity development and material improvement, to justify such liberality to be granted to all at the same time. On the other hand, it would have been convenient to have established a new territorial division retailing into two, three or four political-geographical unities the largest part of the big States, and maintain under the Federal administration those constituted after that sub-division, State of international frontier. The simple intuition of self-defense suggests it.

To be sure such mistakes will be remedied in a revision of the constitution which, it is believed, some day will be done. The practical good sense of the Brazilians so often demonstrated in several historical periods of their evolution warrant our assertion.

At the moment of this writing Brazil is at complete peace with foreign powers and in the most pacific tranquility at home. Thus Brazilians are engaged body and sole in developing the material progress of the Federal District and the 20 States forming their fatherland.

Proteeted by the propieious shade of the liberty expressed in the Brazilian laws there can be seen the speedy progress of sciences, litterature, fine arts, and that multiplicity of exteriorisations of the commercial and industrial activity. Brazil is representing an important role in the concert of civilized nations and the manner in which the rest of the world is getting interested in its affairs speaks for the recognized importance in which this great country is had by the foreign powers.

By reading the following chapters of this book it will be realized that the progress of Brazil in all its branches of activity has been considerable and we may say right here in a spirit of fairness that Brazil at the head of all the South American republics, offers from this very moment an undeniable assurance of the happy future of the civilization of this continent, laying claim, for the neo latin races that occupy it, to those attentions and sympathic demonstrations that the *Giant of the North* knew so well how to conquer for that portion of the continent it dominates.

Is Brazil yet a little away from that progress? It may be true, but...

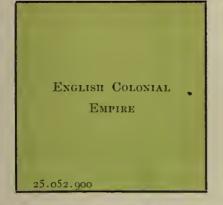
Petit poisson deviendra grand, Pourvu que Dieu lui prête vie...

(Small fish will become large, so long as God give them life...)

Brazilians have no reason to be discouraged, neither is it worth while to think of how much they have yet to overcome. If the road to travel is long, it is nevertheless a glorious one. They have conquered a good deal since the starting point of their colonial freedom. They received a quite weak and disjointel nation, and from it they made a great and homogeneous nationality with immense future possibilities. They will have to work a good deal more, they will have to engage themselves in the struggles for civilisation and nature has endowed them with every element of success. Brazilians to-day seem to be well imbibed in that thing, which, as Emerson said:— a is the only serious and formidable thing in the world »— the will power.

COMPARISON OF THE AREA OF THE FIVE LARGEST COUNTRIES IN THE WORLD

Square kilometres. — Scale 1 m/m = 100 kilometres



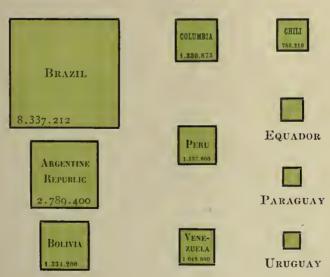


CHINA 11.115.650 United States

BRAZIL 8.337.018

COMPARISON OF THE AREA OF THE DIFFERENT SOUTH-AMERICAN REPUBLICS

Square kilometres. — Scale 1 m/m = 100 kilometres



For the peoples just as for the individuals, progress is just that: to work and to struggle, as for them, using the words of a Brazilian poet,

Viver é lutar. A vida é combatc, Que os fracos abate, Que os fortes, os bravos Só póde exallar.

(To live is to struggle. Life is a battle, where the weak are thrown down but where the strong and brave can only be elevated.)

But, let us go on. We will try to analyze in a concise form the Brazil of to-day.

Before passing in review the diverse aspects of Brazilian life of to-day, by means of a trip to each one of the twenty States, in which the reader will be kind enough tot let us escort him, we must write a few remarks about the Administration and several branches of the civil service of the Republic, leaving that descriptive exposition of the States by their geographical order to follow afterwards.

TELEGRAPH AND RAILROADS

The telegraphic net of Brazil, is the most advanced and the most extensive, under the technical point of view, of all others in the south American republics. Its installation and its initial improvements are due to a Brazilian of great worth, the Baron of Capanema.

The telegraph was operated for the first time in Brazil in 1861. The apparatus used then were those known by the name of A, B, C, with a small show ease and which worked by means of Breguet's electric batteries being in use also at the same time the Stochrer's double current apparatus. These lasted for some time but right after the Paraguayan war they began to use the electro-magnetic current apparatus the currents of which were used by means of magnetic-inductors of the house Siemens & Halske.

The apparatus of the first period of the telegraph service in Brazil were replaced in 1877 by those of Morse, which Brazil was compelled to adopt since then once it had joined the St. Petersburg convention.

At the same time wires were being spread all through the country.

Until a little before the republic was proclaimed the telegraph was living a slow life. An official document says in that regard: « in the decade 1880 to 1889 the average dit not exceed 420.000 telegrams with about 6.000.000 words annually. The maximum being 657.000 telegrams with 8.400.000 words in 1887. There existed the



Rio de Janeiro. — Praça « Quinze-Novembre ».

eircumstance that the public educated with the slow work of the telegraph did not exact very much as to the quickness of transmission.»

This we quote from the report of the General Telegraph Department, published in Rio, in 1902, p. 72.

From 1900 on, however, the volume of telegraphic traffic developped in such a way that the government was compelled to duplicate and in some places increase four fold the leading lines. The Morse apparatus were replaced by those of Baudot, which are in operation in the leading stations of the sea-shore, from Recife to Rio Grande do Sul.

The telegraphic movement in the federal lines in the year 1900 was as follows:

					Telegrams	Words
Private					1.134.653	13.261.189
Official					83.211	2.628.459
From the States					39.690	1.251.215
Press					34.145	3.087.012
				_	1,291,699	20.227.875

To these figures we have to add those who belong to the traffic of the States, as some States have telegraph lines of their own, built and maintained by their treasuries as it happens with Amazonas, Pará, Maranhão, Ceará and Rio Grande do Sul. In the sehedule above are not also included the figures regarding the submarine telegrams, English ones, agencies being established in the principal cities of Brazil.

The Brazilian telegraph is extended and distributed through all the States of Brazil with an extension of 42.008.000 metres with 400 stations new lines being under way of construction.

The following table shows the progress of the telegraphic net of Brazil from the last year of the monarchy:

Years				Metres	Years							Metres
1889.				18.925.305	1896.							39.779.133
1890.				20.299.194	1897.							40.128.045
				28.268.739	1898.							40.232.849
				31.229.438								40.352.404
				34.251.395								41.677.980
				35.494.583		-	-	-	-	-	-	42.902.244
				37.218.000								44.383.249

This number goes up to 50.000 kilometres including the States telegraph lines, those of private railways concerns, etc.

As we see, Brazil can be placed among the States possessing the most extensive telegraphic nets, of which we now give an account: the United States has 650.000 kilometres, Russia 130.000, Germany 118.000, France 96.000, Austria-Hungary 69.200, English India 63.000, Mexico 61.000, Great Britain and Ireland 55.000, Canada 52.000, Italy 39.000, Turkey 33.000, Argentine Republic 30.000, Spain 26.000, Chili 25.000 kilometres, etc., the other countries being below these figures.

The Barão de Capanema for many years managed the service of Brazilian telegraphic lines, always assimilating to the official installation the progresses introduced in the most advanced European countries. This way the national telegraph has always been able to render good services. The successors of the Barão de Capanema in the administration of the service followed his example, not only developping the lines, but acquiring newer apparatus, some of which are manufactured in the work shops attached to the Central Station in Rio de Janeiro.

When they closed in London the International Telegraphic Convention in June 1903 deciding to adopt the apparatus of the Baudot system, for the International Telegraphic service (as the St. Petersburg adopted the Morse apparatus 30 years ago) they found Brazil

already adopting the Baudot system of which 25 installations of the most improved had been made representing four varieties of that ingenious system, in types, that soon will become models for the other administrations. By means of this system there were operated then nine of the leading stations between Recife and Rio Grande, connected by over-head lines with more than 5000 kilometres.

Of those installations four are between Rio de Janeiro and São Paulo and are in operation from November 15 th., 1897. Nine work between Rio de Janeiro, Caravellas, Bahia and Reeife from the beginning of 1903, the inauguration having taken place in July of that year and 12 installations were made between Rio de Janeiro, Corityba, Porto Alegre, Pelotas and Rio Grande. The president of



Railways in Brazil. - The Grota Funda Viaduct S. Paulo.

the Republic, Dr. Rodrigues Alves as well as the Secretary of Public Works, Dr. Lauro Muller were present in the Rio de Janeiro Central Station.

From Rio de Janeiro we can communicate directly with Buenos Ayres, Montevideo, Santiago and La Paz which is at 7.000 kilometres distance via Buenos Ayres.

The Brazilian telegraph lines which work with all regularity, have been built by eivil and military engineers natives of Brazil.

Railways. — The first railway built in Brazil was officially inaugurated on the 30 th. of April, 1854, representing the efforts of one of the Brazilians who more useful were to their father-land, the Barão de Mauà. It is the railway line that starts from the Bay on the other side of Rio de Janeiro and goes up the hill to Petropolis. The first locomotive, the one was used at this inauguration, is still kept to-day at the Central Railway Station. Its name is « Baroneza » and



Engineering Works in Brazil.
Bridge over the rio Ypiranga, in Parana.

it was built in England and rendered good services during several years.

From that small start to the great feats of engineering built by Brazilians there was a great lapse of time. The first feat of Brazilian engineering was the plan of the Central Railway which starting from Rio had to cross the Mantiqueira chain of mountains. It is a series of dear and troublesome work of art : collossal cuts, successive tunnels, etc. The price of this road with 1.399 kilometres went up by the end of 1903 to the amount of 167.596.756 mil reis and this is explained by the nature of the ground it had to be open through.

Another railway whose construction was worthy of note also due to the efforts of Brazilian engineering, is the one from Paranaguà to Corityba, cutting its way through a wild ridge of mountains by the sea. It is extraordinary what they did there. Successive tunnels, many and large viaduets, some perfectly superb under the technic view point and the daring of the engineering feat, form this short railway branch with but one hundred and odd kilometres.

The Corcovado railway is also worthy of note. No tourist, even if the steamer stops in Rio but a few hours, goes away without going to the top of that beautiful hill with a 26 % inclination. This railway was planned and built by the Brazilian engineer F. Passos who is to-day Mayor of the city of Rio de Janeiro.

Another railway worthy of mention is the one between Santos and São Paulo, of which we will write further down though this is not a Brazilian road.

The present condition of the railways in Brazil is as follows:

Five States: Amazonas, Piauhy, Sergipe, Matto Grosso and Goyaz — have no railways as yet. All the others have more or less as can be seen by the following list:

States.	Kilom.	States.		Kilom.
S. Paulo	 4.136	Alagóas		353
Minas	 3.650	Espirito Santo		258
Rio de Janciro	 2.335	Parahyba		141
Rio Grande do Sul	 1.610	Rio Grande do Norte .		121
Bahia	 1.5H	Santa Catharina		116
Pernambuco	 813	Districto Federal		107
Paraná	 645	Maranhão		78
Ceará	 449	Pará		61

In 1896, when Dr. Prudente de Moraes was president, by reasons of reduction of appropriations in the *Budget* all the works under way in the line of railway building were suspended, a great deal of material and work began being lost.

The present government, however, recommenced with great energy all the work of prolonging railway lines and building new ones.

As can be seen by the table we print above the Brazilian railways are very unevenly divided by the different States. Some have not a single mile of road, others have quite a good deal, so that, as it was already remarked by an observer, in the three States of São Paulo, Minas and Rio there are 9.372 kilometres or 62 per cent of the total of the whole country. In seven Southern States and the Federal district there are 11.998 kilometres against only 3.000 kilometres in the eight Northern States that have railways what represents a proportion of 3 to 1. We can, though, very easily explain that state of things: the road is the function of the traffic, it is built where activity demands it. In countries like the United States the inverse often happens and the road is built to create or provoke traffic. Brazil will come to that soon but needs to encourage foreign capital to be invested in those ventures. Unfortunately capital is the great drawback for a more rapid growth. The country is extremely wealthy but it requires capital to work up that wealth to the point of producing and start the motion that has made the United States grow so immensely fast during the last fifty years.

The four largest railways of Brazil are:

The	Leopoldina,	with				٠	2.258	kilometres.
The	Central,))					1.566	>>
The	Mogyana,	>>					1.323	>>
The	Paulista,	>>					1.023	>>

The railways in Brazil have not developped in the proportion of the large sums invested in their construction, because, as it is well known, the largest number of them are built along shore, where the commercial and industrial activity of the country first started and expanded and the sea shore belt is the most hilly. That explains everything. Later on when they will spread towards the west, in the interior, they will be no longer long shore roads but roads of pene-



Engineering Works in Brazil. — The celebrated Carvalho viaduct on the Parana Railway.

tration, running over the immense fields of the plains, the cost of building will be greatly reduced and railroads in Brazil will undergo a larger and far easier development than it has till now.

The same happened in Argentine, when they began building their roads in the plains.

The desideratum of the present day, is to connect the several branches already built, arbitrarily, without any other systematisation but the instinct of the local peoples, expressed by the forms of the isolated necessities, but there being at the bottom a prescience of the national sense, to which the connection work

now very much advanced brings its explanation and sanction. With this I do not mean to say that the most provident polities is always the one that waits for private initiative to translate and satisfy by itself, the necessities of the communion.

Be as it may, the spread out roads of the Espirito Santo, Bahia, Alagoas, Pernambuco, Parahyba, Rio Grande do Norte and Ceará are being connected and in a short while all these States will be con-

neeted to one another by railways, being also connected with Rio de Janeiro, São Paulo, Minas, Paraná and Rio Grande do Sul.

The War Department contemplates to build a long strategic-industrial railway line in the direction of the central regions of Matto Grosso and Goyaz, employing in its study and construction a company of army engineers.

During 1904 were initiated the following roads, sanctioned by laws decreed by Dr. Rodrigues Alves: Timbó (Bahia); Sergipe, the prolongation of the Baturité in the Céará: the prolongation of the Mogyana to Catalão and many others.

The present Secretary of Transportation, Dr. Lauro Muller, in whose program of administration is included all possible expansion of railroad building has not neglected any efforts to execute his program both at the North and South of the country. The total length of Brazilian railroads in 1903 was 16.359 kilometres, and with new inaugurations went up to 17.000 kilometres. The States that opened extensions to their lines were: São Paulo, Minas, Rio Grande do Sul, Bahia, Espirito Santo, Rio de Janeiro and Pará.

ARMY - NAVY - MERCHANT MARINE

Just like all the other South American republies, Brazil maintains a small army, and in ease of war would have to improvise eve-

rything as it happened in 1864 when the Paraguayan war broke out.

Brazil is one of the nations spending the least money with their military forces in relation with the total of the Budget.

Though as to the value of its exports Brazil is in the ninth place, as to the amount spent with the army is in the thirteenth place.



RIO DE JANEIRO. - Imbuhy fort.

The following table shows, in pounds sterling, the total of the

expenses of each country and the amount they set aside for the organization of public defense:

National expense, total and military, of several countries.

Great-Britain . . 126.480.000 40.640. Germany . . 198.800.000 35.080. France . . 135.440.000 35.200.	000
ticinany.	000
Fuence 135 440 000 35 900	
France	000
Holland	000
Russia 150.840.000 36.720.	000
Austria-Hungary 102.480.000 16.160	000
Belgium	000
Italy 67.000.000 13.480.	000
Spain 31.830.000 7.400.	000
Switzerland 6.200.000 2.520.	000
Turkey 17.080.000 6.240	000
Portugal 12.320.000 1.960.	000
Greece 3.960.000 2.000	.000
United States 87.760.000 16.120.	000
Japan	670
Brazil 18.464.890 2.384	567

By this table we can see that no other country having expenses nearing the amount of Brazil spends less with its army than this largest of the South American republies does.



Rio de Janeiro. — Large Rialengo cartridge factory of the War Ministry.

At present the total of the land forces of Brazil composed of the federal army and police troops under military organization and maintained by the respective states is of about 50.000 men of the

three arms. This excludes the civilian guards and fire-men, semi-military organizations maintained in many of the 20 States of the Union.

The active military force is regulated by the Legislature every year. The law for 1904 fixed the following numbers:

28.100 privates.

800 military schools cadets.

1.120 officers.

In case of war this force is doubled,

In Brazil there is not as yet the military compulsory service, as there is in Chili and Argentine, so that the vacancies are filled with volunteers. There is a law to the effect that while military service is not compulsory the time of service for a volunteer is three years, with facility to renew the enlistment as often as wanted but always for a three year term.

The privates who at the expiration of the service time continue without interruption in the ranks, with three years engagement, have right to certain favors in eash; and those who so wish it are placed in the colonies maintained by the war Department in certain places of the territory, where grants of land and agricultural implements are given them free of any charge.

The figures of the Brazilian army divided by the different arms is:

Two engineers battalions; 14 regiments with four divisions each of 231 men and a company for transportation service, all of eavalry; 6 regiments and 6 batallions with four batteries each, each of the regiments having 229 men and each of the battalions having 187 men, all of artillery.

Forty battalions of four companies, each with 241 men, infantry. The arms used by the infantry are Mauser improved.

The artillery material is all from Krupp's works. Studies are, however, being made now for the adoption of a superior type in order to reform the whole artillery of the Republic.

Congress voted 500 contos for the establishment of a smokeless powder in Rio de Janeiro.

The chief objection that could be made as to the organization of the Brazilian Army is the lack of reserves, which might fill the number to reforce the first call. As the different States, however, have all organized police under a military system just alike the federal troops, there Brazil will find a first class reserve, with the advantage that it is, we might say, mobilized, ready as they are in their barracks to march fully equiped at the first call.

The organization of those police forces in their majority commanded by regular army officers and armed with mauser rifles is as follows:

Amazona	S											1.200
Pará .											•	1.300
Maranhão)			•								450
Piauhy ar	id I	}io 6	ranc	le do	No.	rte	•		•			450
Ceará									٠		٠	400
Parahyba	١.											200
Pernamb	uco											1.350
Alogoas a	md	Serg	ipe									800
Bahia							•					2,500
Rio de Ja	mei	10									•	1.200
Capital F	'ede	eral					•		•		•	4.800
S. Paulo											•	5.000
Minas	•		•			• *		•	•	•	•	2.000
Paraná									٠			460
Rio Gran	de,	do Si	ıł							•		5,000
Espirito	Sar	ıto,	San	ta Ca	athai	rina,	Go	yaz a	nd i	Matte)	
Grosso		•			•	•	•		•		•	1.075
												28.185

These forces, in several of the States, have an elevated degree of instruction and military solidity, as it happens with the regiments of Manáos, Belem, Bahia, São Paulo, Rio Grande do Sul etc. and are divided in three arms infantry, eavalry and artillery.



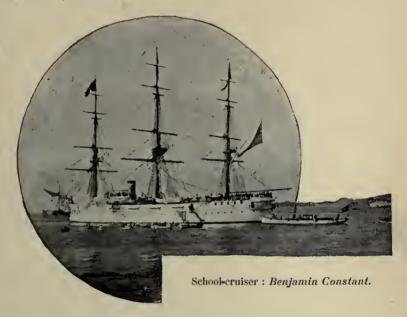
Infantry camp during manœuvres.

The national guard, a kind of *Landwehr* or territorial militia is getting better organized every day and in some States as Rio Grande do Sul and the Federal Capital it has been ealled upon more than once to assist the regular army.

The war department maintains several technical establishments,

as the eartridge works, the Estrella and the Caxipó powder works, the « Brazil » Military College, the « Realengo » and the « Porto Alegre » Tactics Schools, the Military School, where the children of military men are brought up, the Serjeants School, the Army Library and several others.

The forces are spread out through the territory of the Republic which under the view point of military administration is divided into seven districts with headquarters in the principal cities and commanded by Generals.



At present the Army Major-State is drawing a map of the country and the engineers companies are busy, some extending the telegraph net through the Western States, and some studying plans for the building of strategic railways. An engineers company is now building a railway starting from Lorena city to the mountain region where a large military Sanatorium is being built.

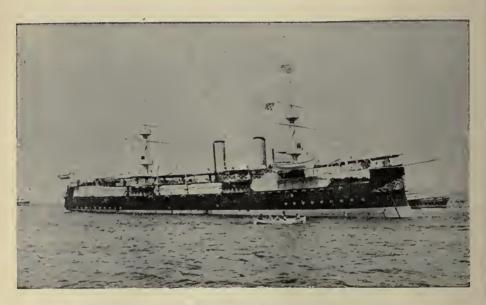
* *

THE NAVY. — Until a certain time Brazil was the only South-American power and in all this continent, only the United States could present a navy excelling the one of this Republic.

Lately Argentine and Chili at the cost of enormons financial sacrifices succeeded in disputing this supremacy and to their navies, which, however had not the glorious traditions of the Brazilian history of its navy, they added a number of cruisers and battle-ships superior to the Brazilian ones.

The navy organization of Brazil at the present date is a modest one and is not in proportion with the long coast it has to defend. The federative system adopted increases the responsibilities of the navy.

The existence of a powerful navy in the federative system corresponds to the necessity of great links of cohesion between the States which may neutralize their disaggregating tendencies, and establish predominance of the ideas of the great fatherland. There is not, in fact, and we have already once said it, among the links of national stability, none tactile, none more dominant because of its representative power neither more efficient in multiplicity of its objects, than it is the naval power of the Republic. The present



Tamandaré (cruiser) 4000 T., built at the Rio de Janeiro arsenal.

fleet has 54 vessels, counting large and small, many of which are almost useless under the view point of modern war value. They can only be used for patroling in the ports and interior rivers. They are classified as follow: Seven battle-ships, eight cruisers, three torpedo boats destroyer, five gun boats, eight dispatch boats, three steamers, nine torpedo boats, three tugboats, auxiliary steamers, a yacht (the « Silva Jardim », the old Imperial galiot), two brigs and three pataches.

The headquarters of the Navy forces is composed of several pavilions. The present commander is Commander Marques da Rocha, to whom the discipline and military garb of the navy infantry forces owe a good deal.

The principal establishment for naval production and repairs is the Capital of the Republic — the Rio Navy Yard — and employs 2.000 working-men. In its ship-yards several ships, eruisers, small river battle ships and others have been built. During the Paraguayan war this yard in a few months built and armed several armed monitors, which were of great assistance in that campaign. Lately were built there two small river monitors for the defence and patroling in the frontier rivers.

There are two other navy establishments of this kind, one in Pará and the other in Ladario. They assist in the work of repairing.



Battle-ship Deodoro.

There is also in the Capital of the Republic the Navy College, an establishment of technical instruction which is an honor to the country and is probably the best in all South-America. Its present director is rear-admiral Duarte Huet de Bacellar one of the most distinguished and ablest sailors of the Brazilian Navy. A man who has discharged with great honor to the country he represented important commissions all over the world. He is not only an able man in navigation, he is a competent man in gunnery, ship-building and every department required in navy activity. As a practical man

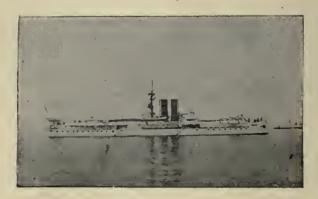
he is he is improving very much the Navy College under his administration to keep pace with modern progress.

The other Navy departments are settled in small islands in the bay. In one of them is Torpedoes School organised by rear-admiral Alexandrino de Alenear and the works established there for torpedoes and mines repairing are worthy of note.



War transport Carlos Gomes.

The National Sailors Company Barracks is a series of buildings in the small island of Villegaignon, where is the fortress of the same name. This fortress does not serve any strategic function now and is all illuminated by electricity.



Battle-ship Riachuelo.

The Sailors Company is constituted by sea men, that come from the Schools for apprentices or from the offices of the Captains of the Port in the different States where they enlist. The largest number of them are *caboclos* (native Indians), or rather, a mixed breed of those native Indians erossed with Europeans, with a number of blacks descendants from Africans and whites. As a rule they know how to read and write, having received in school instruction relatively liberal, learning geography, arithmetic, civilian rights, music, drawing, elementary history, a little manual art appliable the the sea life, and the needed professional instruction: gunnery, signal service instructions, torpedoes, marine engines, etc. Generally the Brazilian sailor is a man who knows something and when they come from the Apprentices Schools they are prepared to struggle for life in the eities when they finish their enlistment time.

This way the Apprentices Schools in Brazil render a double service to the community and to the man: they not only prepare sailors for the Navy but men for practical life at the same time.



Cruiser-torpedo Tymbira.

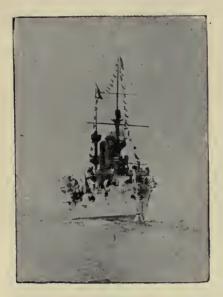
The Company of Marine Infantry is an imitation of the colonial and landing troops of the European navies; among Brazilians, however, this company has a capital function on board — it is a modifier in the permanent service of the discipline of the ship, an auxiliary actually indispensable to the moral force of the officers. This company has a tradition as an orderly organization and its services have been highly praised in the Naval history of Brazil. Its barracks are at *Ilha das Cobras* (snake island), one of the many in the Rio bay, near the north east part of the city.

In the schedule of the officers, the number of those of high rank is rather large if we consider the limited requirements of the floating material. The schedule comprises:

1 admiral, 2 vice-admirals, 10 rear-admirals, 20 Captains, 40 Com-

manders, 80 Lieutenants-Commanders, 160 1st.-Lieutenants, 150 2nd.-Lieutenants = 463 Officers in active work.

Besides these there are 120 ensigns; 4.000 men of the National Navy Companies; including 150 men of the engine firemen company, and 100 of the Matto Grosso company; 900 contracted firemen;



Cruiser Barrozo.

1.500 Navy apprentices; 500 men of Navy Infantry Company.

In time of war the naval forees will have the double of this number.

The privates or sailors and ex-privates or ex-sailors who have been engaged over three years, and following that, two or more years have a right in each engagement to the value in cash of the uniform which is distributed free of charge to the recruits, and this because the military service in Brazil is not compulsory.

In nearly every sea port there is an Apprentice Sailor School, a curious institution under the view point of its eivic.-military

nature and of its utility and its type is a creation of the Brazilian administration. Some of them deserve special mention because of the correctness of their organization and discipline, and among these are the ones of Ceará, Pernambuco, Bahia, Rio de Janeiro, Santa Catharina and others.



Marine practice, shooting at a target.

References to them will be made in the descriptions of the several States which will be published somewhere else in this book.

The seat of the Navy administration is in Rio de Janeiro, where the Navy Council is compelled to be. The Navy Council is a Board composed of Navy generals and high officials of the Navy Department and is settled where the Sailors quarters, the Navy infantry barracks and several departments of the same Ministry as well as war material are also settled.



Rio de Janeiro. — One of the pavilions of the Marine infantry barracks.

To-day the Brazilian Navy is largely improved and on a fair way to be greatly enlarged. By the end of 1905 the Brazilian Congress authorized the appropriation to execute the following naval programme which is beginning to be put in pratice in England with the construction of

Three 13.000 ton battle-ships.
Three 9.700 ton eruisers.
Six 400 ton destroyers.
Twelve 50 to 130 ton torpedo-boats.

Admiral Julio de Noronha, the Secretary of the Navy, the author of this programme, is also building at Ilha Grande, near Rio de Janeiro, a large military port like the one of Spezia or Pola, with arsenal, dry-docks, ship yards and everything needed for a powerful Navy-Yard.

Besides the ships above mentioned the 1905 programme comprises also 3 submarine boats, a large coal-transporter and a school-ship.

At the present moment Brazil is developing a great activity

which will soon place the country in a prominent place after the list of nations having first class navies.

* *

MERCHANT MARINE. — The fact of many Portuguese officers and ship-owners having settled themselves in Brazil, after its independence, explains how there was already a considerable nucleus of merchant marine right at the beginning of the national organiza-



School-ship Guararapes.

tion. Besides the extensive line of coast filled with numerons ports most accessible, contributed towards the great development of a sailing ships merchant marine, served by daring ships furnished by the sea-shore cities and thus soon the new Brazilian flag was carried to the peoples of distant lands.

This relatively powerful marine had, however, a period of difficulties and almost reached paralysis: and that was when a bill voted in 1864 permitted foreign ships to engage themselves in the coastwise trade, taking thus away from the Brazilian flag a privilege it was enjoying till then and at

whose protection it was developing in a considerable way its maritime activity.

It was only in 1896 that the Brazilian Congress by means of a bill completing a constitutional disposition, gave back to Brazilian ship-owners the old right of only consenting coastwise trade to be carried on by ships with the national flag and thus was opened a more definite and more compensative horizon for the country's merchant marine.

During the year of 1819 steamship navigation began to be introduced in Brazil and the other South American countries. It was on

the 4 th. October 1819 that General Felisberto Caldeira Brant, later on Marquis de Barbaeena, started a line between the capital of Bahia and Caehoeira employing in that service a small paddle steamer and that was the initiation of the Brazilian merchant marine using steam-boats.

When the privilege of coastwise trade for the national marine was decreed in 1896, the Brazilian merchant marine took a great impulse, occupying to-day the seventh place among the nations with



MERCHANT MARINE. - Model of river steamers of 500 tons of the « Companhia Maranhense ».

largest number of ships in their merchant marine, being right after Japan.

According to an official publication of the Commercial Statistics Department the movement of Brazilian ships engaged in coastwise trade between the 52 ports of the Republic during 1901, 1902 and 1903 was as follows:

1901

Entrances					Ships.			Tons. 3.874.329
					11.554	,		
Sailings					11.246			5.870.595

1902

Entranees.						Ships. 41.745			Tons. 4.567.266
Sailings .		٠				11.681			4.568.579
				1	90	03			
						Ships.	t		Tons.
Entrances.			٠			12.252			5.099.780
Sailings .						12.217			5.058,900

By these statistics we see the progressive growth of the merchant marine maritime movement. According to official statistics the Brazilian merchant marine has a fleet of 336 steamers with a total of 296,000 tons displacement, and 541 sailing vessels with about 300,000 also displacement.

From 1901 to 1902 the movement of the Brazilian coastwise trade navigation increased 300 in the number of ships and over 600.000 tons, in the entrances and sailings to and from the 52 ports of the country.

These steamers belong to companies and private ship-owners residing in several sea-side cities of Brazil. The principal companies



MERCHANT MARINE. - Model of steamers of 2,000 tons of the Brazilian Lloyd.

to-day are: the Novo Lloyd Brazileiro which possesses 32 steamers, some of 4.000 tons, electric lights, refrigerators, etc., but this company is being reorganized by Dr. Manoel Buarque de Macedo, a civil engineer of renown and an industrial genius of no small importance, and the service of that company is going to be largely improved not only with better coastwise service but having a line of large steamers plying between Brazil and the United States, a large number of steamers being now under construction for the new service, some of

which will be 6.000 ton boats; the Companhia do Amazonas, with 40 small river steamers from 500 to 900 tons, plying between Pará and the different points of importance in the Amazon river and its affluents; the Companhia Costeira, with 12 steamers from 800 to 1.500 tons, maintaining regular navigation between the capital of the Republic and the Southern ports of the country; the Companhia Sal e Navegação, which possesses large eargo-boats employed in coastwise service; the Companhia Pernambucana, with 10 steamers; the Companhia Maranhense; the Grão Pará and the Paraense, both with main office in Belem, capital of Pará State, and with steamers from 800 to 2.000 tons; the Esperanca Maritima with six small steamers; the Viação Central do Brazil, with main office in Bahia and its steamers navigate in the S. Francisco basin between the States of Minas, Bahia and Alagoas; the Companhia Bahiana with internal and interstate navigation and many others of smaller importance, which we will give an account of while speaking of the different States in the second part of this book.

INVENTORS AND MEN OF SCIENCE

It will be seen that hand in hand with the material development of the country, and parallel growth of the energies of the race, there is springing forth with vigor the blooming of the literature, arts and sciences.

No other country in the American Continent, the United States excepted, can present a group of superior men, inventors, men of science, artists and literary men, so conspicuous as that host of celebrated men who have honored Brazil with the wide publication of their names all over the world since the middle of the last century.

In accordance with the plan of this book, dealing in it, as we do, only with the Brazil of to-day, of the Brazil of this very moment, we must not write but about those of the present age. Men who have been intellectual glories for Brazil in the past, artists, military men who won reputations worthy of mention in the days that are gone, will not be reviewed in this presentation I am making to the reader of the contemporary things, men and events.

But, even leaving aside the names of those illustrious dead,

among which you would find individualities that do not belong only to the glory of Brazil, but to the whole world, we will have to write about most interesting personages, notabilities of our days, some of which are, no doubt, known to the reader. We will begin by Santos Dumont, the extraordinary air navigator.

This name which introduces a South American notability has been applanded in France as well as in all the other European countries with the same enthusiasm that Brazil has done it.

Santos Dumont. — He is the son Henrique Dumont a farmer of the State of Minas, whose name is connected with the largest coffee



SANTOS DUMONT

p'antation in the S. Paulo State, or, for that matter, in the whole world. He was born in a place known as Rio das Velhas, (Old women river), in the then province of Minas, in July 1873. Wealthy and well educated he devoted himself since his young days to the study of air ships. He went to Paris and there had a balloon of his own invention made. Since then he has kept on modifying it and each modification he makes, manufacturing a new balloon gives it a higher and successive number. It was with the No 6 that the daring aeronaut obtained the «Deutsch» prize which marks the solution of the

problem of the direction of air-ships.

It was in 1898 that he made his first ascensions with his baloons « Brazil » and « America », of spherical shape. In those experiments, which had no interest to the public, he understood that the spheroidie shape was not useful and had one made, cigar shape, with Kerosene oil as fuel.

He has made since many trial trips and the French press has written about them in the most encouraging way and from Paris the telegraph has kept on informing the whole world of the successive improvements Santos Dumont has been introducing in his air-ship.

Several engineers and inventors in Brazil have devoted themselves to this interesting problem, the first being Bartholomeu Gusmão, who went in his baloon but never solved the problem of its direction

and the last was the unfortunate Augusto Severo who died in Paris, vietim of the explosion of is air-ship « Pax ».

Mello Marques, - From those who travel in the air to those who travel under water there is really a great distance but there is no space so long that thought cannot over-

come with ease.



MELLO MARQUES

Several Brazilian inventors propose to build a model of submarine boat fulfilling all the requirements of the navigation of such boats. None, however, has made a more decisive experimental demonstration than the inventor Mello Marques. The Rio press wrote in the highest terms and most enthusiastically about those experiments, made, as they were, before the President of the Republic and a committee of technieal experts.

Among other things the Tribuna of Rio, in its edition of the 27 th. September 1901 said about Mello Marques 'submarine boat.

« The model used in these experiments demonstrated to have a longitudinal and transversal stability as well as complete stability in its trip.

» Both the immersion and emersion are operated with the strongest safety as to its results.

and by means of a most simple manœuvre.

» To avoid a minucious and detailed account we may say that the experiment we are writing about consisted of two different parts:

» 1st. - The boat without longitudinal translation.

» 2nd. — The boat with longitudinal translation.

» In the 1st part the boat made the immersion,



The submarine boat Mello Marques.

emersion and stop between two waters, everything with the most strict practical precision, obeying perfectly well to the operator.

» In the 2nd part Mr. Mello Marques showed to have solved the important problem of the sailing stability.

» Thus it was that once the boat placed between two waters and in perfect quiet or static equilibrium, when placed in motion its propelling machine, it slided forward without deviating in the least from its fluctuation horizontal plan. »

LANDELL DE MOURA. — Is another Brazilian inventor of our days. He is the learned electricist Father Landell de Moura, and is now residing in the United States. His inventions are the result of a patient investigation and scientific knowledge perfectly solid. He was born in Porto Alegre, where he has two brothers, one a physician, the other an apothecary. In S. Paulo he has another brother who is a merchant. The New York Herald in its edition of the 12 th. October 1902 published his picture with a long article headed a Brazilian Priest's Invention a giving the following information about his inventions:



LANDELL DE MOURA

Dr Robert Landell invented his apparatus in Porto Alegre, and as soon as he reached São Paulo in 1896, he began with preliminary experiments, to obtain his object — to transmit human voice at a distance of 8, 10 or 12 kilometers, without using any wires.

After several months of hard work he obtained excellent results with one of the apparatus he made.

Encouraged by the results of his experiments, Father Landell tried to improve his invention, which is the outcome of studies and discoveries of some laws relative the propagation of sound, light and electricity through the space, the earth and water.

Thus, he invented several apparatus: the telauxiophone, the kaleophone, the anematophone, the tetetiton, and the ediphone.

The talauxiophone is the last word of the telephone, not only because of the force and intelligibility whith which it transmits the words, but also because with it telephoning at great distances becomes a practical and economical reality.

The kaleophone works also with wire, and presents the origina-

lity of not needing to ring the bell to call, to hear the articulated sounds, or that of the instrument.

The anematophone and the teletiton are wireless telephones. The perfect operation of these apparatus, according to what their inventor says, reveals laws entirely new and is altogether most curious.

The *ediphone* is useful to purify and soften the phonographed voice of the parasitical vibrations, reproducing it just as the natural voice.

The wireless telephone is reputed the most important discovery of Father Landell, and the experiments made by him in the presence of the English Consul in São Paulo, Mr Lupton, and many other parties of high social position, were so satisfactory that Dr. Rodrigues Botet, giving an account of those trials wrote the moment was not far when Father Landell would be consecrated as the author of maryellous inventions.

In a Porto Alegre daily paper we saw the following biographical notes about this inventor:

« Father Robert Landell de Moura was born in Porto Alegre in the year 1862.

He is a son of Mr. Ignacio de Moura and a brother of the apothecaries, João, Edmundo and Ricardo Moura, of Dr. Ignacio Landell, a physician and of Mr. Pedro Landell de Moura a well known São Paulo merchant.

Having decided from his childhood to become a priest, Robert Landell went to Rome while yet quite a young fellow, there he followed the theological course with distinction and was ordained. By this time he was already studying with special care physical sciences. »

HUET DE BACELLAR. — The elever and illustrious Rear-Admiral Huet de Bacellar is another contemporary inventor and is one of the most distinguished officers of the Brazilian navy. As a Captain, commanding several men-of-war, he had occasion to observe the defects in the tubes of the submarine torpedothrowers, which, in fact, are far from giving satisfaction, in their practical work, not only because it is impossible to regulate the charge



HUET DE BACELLAR

of the cordite, or the pressure of the gas inside the tube, but because of other defects verified every time use is made of the torpedothrowers, sometimes causing disasters as it happened on board the men-of-war « Aquidaban » and « Deodoro ».

While commanding the small battle-ship « Floriano », rear-admiral Huet de Bacellar attempted to put in practice a modification of the apparatus Schwartzkopf, which he had in mind to realize after long studies in other ships. He ordered in that German house the manufacture of a torpedo-thrower as he invented, and experiments were made the result of which representing a great triumph for the elever sailor.

In a lecture delivered in the Navy College on the 23rd. May 1902, with the presence of the President of the Republic and high authorities of the navy, he said:

The apparatus works by means of compressed air, and in that there is nothing new.

What is really new and what characterizes this invention is the peculiar disposition of tubes themselves and the arrangement of the valves which let the compressed air pass to the cylinders from the external to the internal tube, making it go on till the end of its course when the torpedo is expelled. In the initial movement only the cylinders of the external tube receive the air, but after the air having gone a certain course the torpedo gets loose from its safety links automatically, the valve that gives the double entrance of the air in the cylinders is then opened, the air that enters oft hastens the movement of the internal tube and the air that enters fore passing through the stems of the embolus causes the firing of the torpedo. The remaining air, that stays inside the cylinders, in their fore part, serves as a kick-stopper.

Once the torpedo fired, the internal tube gets in automatically to its initial position by the external pressure of the water and when by some circumstance this does not happen, it is taken back from the battery by the compressed air, or by hand, by means of a mechanical device.

Brazilian and European experts recognized the importance of the invention to which the german manufacturers gave the name of Bacellar-Schwartzkopf and which was adopted by the Brazilian navy, the battle-ship « Floriano », commanded at the time by the inventor being the first one to adopt it.

RADLER DE AQUINO. — Is a young navy officer who invented an apparatus of practical use which proves how well prepared in scientific studies the Brazilian navy officers are.

His invention is thus described by the official organ of the Navy: « It consists of an apparatus in two different parts a transmitter and a receiver where are a number of copper contacts corresponding to the different orders to be transmitted or received.

Both receiver and transmitter have a lever and not only this has a wire connecting it to the other, but the contacts that correspond to the same indications, in this two apparatus, were also connected by means of a metallic conductor.

A current running through the wire that connects the two levers, can, indifferently, circulate through either of the elementary circuits,

But the electrical communication can only take place by one of the mentioned eircuits, when the lever of the receiver is in symetric position with that of the trans-



Lieutenant Radler de Aquixo

mitter, that is, it is necessary that the two levers should mark the same signal.

It must be said: when that takes place, two lamps, one of the receiver and the other of the transmitter, placed upon the wire that connects the levers, will prove that the general circuit has been elosed.

On the other hand, the lever of the transmitter is built in such a way that while one of the extremes slides by the contacts above mentioned, the other extreme, passing over the contacts that are between it and the other contact indicating the order, produces the closing of a special circuit, causing that way the vibration of a bell in the receiving section. »

Lieutenant Aquino's device is worthy of mention mainly by the simplicity of the apparatus, when compared with those of Fiske, used by the United States Navy and those of Barr and Strond used by the English navy.

Besides, he has also invented a chemical indicator, to substitute Lord Kelvin's mechanical one, in the average soundings of hydrography or rapid navigation.

Radler de Aquino continues in his scientific studies, and besides the above described apparatus has several other inventious, among which is the velocimetre, destined, as its name indicates to measure the speed of the ship, based upon, in the live pressure of the water caused by the presence of the boat, the apparatus having been named by its author « pieso-velocimetro. »

Experiments made in July and August 1900 on board the « Barroso », a Brazilian man-of-war, produced excellent results.

RIBEIRO DA COSTA. — Is the name of another Brazilian inventor, also of the navy. He is an engineer with the rank of commander and is at present in charge of the Work-shops of the Rio de Janeiro Navy Yard.



Engineer RIBEIRO DA COSTA

This intelligent Brazilian scientist, devoting all his spare time to the problem of the life-saving service, invented and built a life-saving boat very curious and original. It is a small open canoe, unsinkable destined to the lifes-aving service of passengers and crews of wrecked boats. It offers the greatest facilities of being placed in the water and has absolute safety of fluctuation.

The Commander Ribeiro da Costa's lifesaving boat is patented in Europe, and in the last Paris exposition 1900 received the highest

award, the jury of the exposition having recognized the merit and true value of the ingenious apparatus destined to represent a prominent place among the useful collections of the life-saving societies. Commander Costa has two different models of his boat.

An article written on this invention states that for the landing of troops in ease of war, any of the two types will be of great moral effect for the soldiers, since they will know immediately that they can't die drowned even should the boat receive any number of shots from the enemy.

He also invented the construction of a raft appropriated for the ships with large crews. This raft is built with lumber and canvas and was tried with great success as well as presented to the Pollock competition in Europe. Its model, as the one of the other saving boats is on exhibition in the Naval Museum of Rio de Janeiro.

Engineer Ribeiro da Costa enjoys a good reputation as an intellectual man. He keeps on devoting himself to that branch of naval construction, but has invented other apparatus for several other applications.

Besides the two life-saving boats and the new raft « Pliant », the apparatus « Directiophone » devoted to know the direction of the

sound of a steam whistle in foggy weather and the practical and infallible rules to avoid collisions in the high seas during foggy weather, he has several inventions, all of them original patented in Europe, and submitted to the Brazilian Government, such as:

A semi-submarine torpedo-boat with great advantages over the other ones used to-day and ordered to be built by the government at the Rio Navy Yard. Unfortunately it was not built the material having disappeared during the revolution of 1893.

A rotatine steam engine, patented and tried in Brazil.

A steam engine, completely new in all its devices, with great advantages over others, patented in France, Belgium, Germany, England and United States, devoted specially to navigation, built and tried in Havre in 1891, received the prize in the Modern Inventions Exhibition in Paris, receiving great praises in several magazines as well as the gold medal « Jaceguay » in the Naval Club of Rio de Janeiro.

A new distribution of steam, without exeentrie, patented in several countries.

A new sucking treading pump, oscillating movement also patented.

An apparatus to feed boilers automatically.

A new steam engine for navigation purposes.

A new four concentric tubes boiler patented in several countries.

A machine to make tooth-picks.

A very original engine working by means of compressed air, all automatic, the result of 28 years study, built since 1897 in Marseille, lacking yet a few small details to make experiments.

An hydraulic turbine, for navigation purposes.

A new apparatus to feed automatically any boiler even a ship one about to be tried soon in the Rio Navy Yard.

A new submarine torpedo.

Francisco Przewodowski. — Is the name of another Brazilian inventor. He is a navy officer as is father was. He was born in Cannavieiras (Bahia) and as his name indicates is Polish descent. He was educated in the Naval College and devotes himself to the study of physics and mechanic. The invention that placed him in evidence among professionals and which won a 15 year privilege from the Brazilian Government was his apparatus « Przewodowski » destined to the self direction of torpedoes against movable or fixed aims.

This apparatus, result of patient studies, is a series of pieces

disposed so, that it permits the use of the iman or magnetic needle to give self direction to the torpedoes. According to the patent the apparatus has two parts, the first with an iman, the following with bobines where the electro-iman necessary is obtained. They are separate, each occupying its chamber and the second is lined with china except the discs of the eyes were placed the extremities of the bobines. The only communication between the first and the second is by wires, sufficiently isolated crossing the intermediary wall allowing only the passage of the electric current that is going to act upon the helm of the torpedo making it take the direction of the aim or target. The inventor received proposals for the purchase of the invention from an English house but refused to sell it which he is still improving every day in Rio. He also applied for patent in several European countries. Lieutenant Francisco Przewodowski is a persistent and intelligent investigator and a hard worker, and expects yet to improve considerably his own invention.

The experiments he has made have, so far, been most successful.



ADEL PINTO

ADEL PINTO. - He was born in S. Gabriel, Rio Grande do Sul. He first studied in the Military College of Rio, linishing in the Polyteehnical College of the same city. In the army reached the rank of 1st Lieutenant of artillery. Since his youth he has devoted himself to special studies on electricity and its applications. Several discoveries and mechanical inventions give him a prominent place among Brazilian inventors. We must mention specially: a new process for preservation of meat and fish, which is being exploited by an exporting enterprize in the

River Plate. Another one is a curious apparatus to avoid railroad

collisions by means of a new Block-system absolutely automatic, electrical-mechanical, simple, safe and economical. It was tested and tried by the Central of Brazil Railroad and judged as possessing splendid and safe conditions to guarantee its object. Another one of Dr. Adel Barretto Pinto's invention consists in utilizing the power produced by the column of air dislocated by any vehicle in motion, such as trains, ships, automobiles, etc., transforming this power in electrical energy in benefit of the same vehicles, multiplying their motive power with economy of fuel.

This transformation of power is made by means of a compressed air turbine, constituted by eight paddles in serew form, adapted to the front of the vehicle, the turbine becoming a special generator, forming a system, by means of a combination of pulleys with a small dynamo of electro motive power proportional to the power of its reversibility.

Gomes Pereira. - (Antonio Coutinho) Another military inventor. He belongs to the navy. As the reader can see this class gives a good contingent of inventors thanks to their initiative intelligence, and to the excellent scientifie culture acquired in the Navy College of Rio, Gomes Pereira was born in Rio, graduated from the Navy College where he was always one of the first in all the classes he had to go to. After a few trips, both in the Atlantic and the Pacifie, having visited the principal Arsenals and Navy yards of Europe, he was



GOMES PEREIRA

commissioned as sub-commander of several ships, and later on commander of the torpedo-boat « Tamoyo », where he revealed himself a sailor well posted on modern warfare. After the Russian-Japanese war, he invented, taking advantage of what he learnt in that war, a most ingenious apparatus an automatic commuter for the circuit of the firing of the guns on board. This apparatus, patented already by the Brazilian Government has as an object to avoid the deviation of the bullet and loss of the shot eaused by the motion of the ship and is being adopted by the Brazilian Navy with great praises from the authorities in this line. He has still other inventions but this automatic commuter is the one worthy of special mention in this chapter of our book.



OLIVEIRA DE MENEZES

OLIVEIRA DE MENEZES (Augusto Xavier). - He was born in 1879. When he was 13 years old he entered the National Gymnasium. . He followed his preparatory studies with distinction. He had great inclination for the study of physical and natural sciences, revealing an inventive genius, preparing expontaneously most eurious apparatus to be worked by electricity. He has a battery of his own that works with common kitchen salt. Later on he was professor at the National Gymnasium. He entered afterwards as student to the

Medical College. In 1902 he wrote a work with the title « Noções succintas de Chimica Philosophica» which made a name for him. In 1903 he published a new work on chemistry which adopted by nearly every one of the Rio professors. In 1905 he took part in the Scientific Latin American Congress where he presented a notable « paper » on « .1 Atmosphera rarefeita » presenting highly important phenomenon. His work was unanimously approved by the learned men present at the meeting both foreign and natives. This meeting was held in the Polytechnical College of Rio. He was then but 25 years old. He has several inventions worthy of note, which he has not put in practice

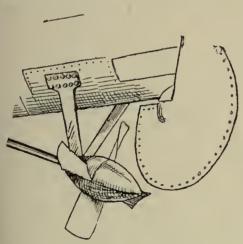
for lack of material elements as it is: an electro-multiplyer, a regulator of the incandescent lamps intensity, an electrical accumulator, searched by the use of a metal not as yet exploited, and which according to his theories will be the ideal of modern electricians: small weight and volume, large capacity. He is now writing a work on physical science entitled « Noções succintas de Physica Elementar.

EDUARDO CLAUDIO. — He is another engineer, born in Rio de Janeiro, to-day at the head of the technical section of a tramway company. He contributed towards the good name of the Brazil of to-day, inventing a propelling apparatus destined to substitute the helix of the steamers, just as the helix substituted the wheels or paddles. The Brazilian Admiralty much interested in the new propeller, made strict experiments adapting it to a port torpedo boat, the « Sabino Vieira », obtaining results that encouraged the order



EDUARDO CLAUDIO

to adapt it to a large ship which is now being done. All the technical world accompanies with an interest that can easily be imagined, the trial proofs of the ingenious apparatus to which its inventor gave the name of *Trochoidal Propeller*, or simply *Trochoide*.



The « Trochoide »

Dr. Eduardo Claudio is a serious man, an investigator, and endowed with large theoretical knowledge. His invention is not a casual discovery, but the result of much thinking and untired studies of several years, luckly crowned with good results.

The construction of the new propeller obeys to a new theory absolutely opposed to the theories of the helix.

These theories claim that the propelling action of the

helix is due to the reaction produced upon the water by the fore side of the helix paddles, which would be equivalent to saying that the trochoide ought not to work efficiently. Notwithstanding the Trochoide not only proved its economical superiority over the helix in experiments realized with a torpedoboat in the bay of Rio, but also proved that the vibrations that seem unavoidable in the ships of great speed propelled by helix have no reason to exist, and will absolutely disappear when propelled by the trochoide.

In spite of the imperfections of the first apparatus experimented, comparing it with one of the best helixes, an economy was realized of 30 $^{\circ}$ /_o.

The Brazilian Government has ordered the construction of several of these apparatus, in the Rio Navy Yard, to be used in the first boats to be made which will be propelled by the *trochoide*, putting aside the helix wich does not come up to the same perfection. It is the eternal work of the indefinite progress.



Torquato Lamarão

Torquato Lamarão. — An electricist of renown, a native of Pará, has become quite prominent with his work on electrical oscillations, applied to the wireless telegraph and to the direction of submarine war torpedoes. For this torpedo — submarine torpedo directed by the hertzian electric waves — the Brazilian Congress has voted a subsidy of twenty contos for an apparatus to be built.

This torpedo has in its favor the approval of all the Board of engineers of the War Department, that declared officially, after studies

ordered by the Secretary of war a that the invention with slight modiffications, indicated by the Board, could render the highest services to the defense of the Brazilian ports. »

Experiments made on board the steamer «Ituhy» of the Brazilian merchant marine in 1900, and others made in 1903, in Rio, before many experts, showed the importance of electricist Lamarão's invention. For the last 16 years Mr. Lamarão has devoted himself to the study of physics and chemistry.

With his apparatus, transmitter of hertzian waves, the inventor in that test put in operation the watching torpedoes which exploded

as soon as they received the waves. Afterwards he made four of them explode simultaneously by means of waves sent also simultaneously.

The wireless telegraph, invented and built by him, it is a device so arranged that assures safe and perfect work.

This ingenious inventor and electricist has still other instruments, of great utility, invented by him, as the *Sondographo*, devoted to register on a dial the soundings in navigated canals, and the *Electric Warner*, to denounce the presence of water in the hold of the ships.

His most important invention is the torpedo apparatus, examined by military engineers, and, as has been mentioned above awarded a prize by the Brazilian Congress. The press wrote extensively and enthusastically about the success of the experiments made on the 16th. April in Rio where the advantages of his invention were plainly seen.

Pereira de Lyra. — Here is the name of another Brazilian extremely fond of the natural-physic sciences, a name that has just won fame for the invention of a motor, extremely ingenious. Dr. Antonio Alves Pereira de Lyra was born in the ex-province of Pernambuco. He became a physician but kept on studying with the greatest love and care physics and mechanics making searches appliable to these sciences, and in this work he is always patient and clever.



PEREIRA DE LYRA

He invented several apparatus and industrial devices, devoting to this work all the spare moments of his clinical occupations and his functions as a member of the Brazilian Congress where he represents his native State. None of those inventions, it seems, will meet the success which is apparently reserved for his *Motor-Turbine*, of a system entirely new, which will substitute the steam, gas and water engines in use to-day in the industrial establishments. In a comparative experiment in which it was put side a side with the *Curtis* turbine, it was shown that the new turbine is so superior that it does not stand comparison, being besides much simpler and cheaper.

Being unable to give here a complete description of this invention we limit ourselves to transcribe from the *Jornal do Commercio*, of Rio de Janeiro, the following paragraph in which they referred to this invention at the time granted a three year patent to the inventor. « Entirely different from all the others by its shape and disposition of its paddles, the new turbine may be made with one single wheel, which is capable of reducing its speed to the limit exacted by practice. It is a returnable engine, which, by the simple movement of a cock, goes indifferently to the right or to the left, without any alteration in its delivery. It avoids completely shocks and whirls, because of the special disposition of the paddles and the direction of the throw. The admission is made by means of automatic valves, moved by the steam itself, which maintain always the same pressure, never mind what the charge and system of the engine may be. In short, it is a simple apparatus, light, economical, offering resistance and able to substitute with advantage the motors of its kind, in a large number of applications. »



OSWALDO FARIA

Oswaldo Faria. — We will now mention a name which will be often repeated in future as everything now indicates. It belongs to the youngest of inventors as he was but 15 or 16 years old when he made his appearance before the scientific world as an inventor. He was born in Rio de Janeiro but is now in Paris finishing his scientific studies. The press of the whole world, and much specially the French one wrote extensively about his discovery.

Morales de Los Rios the well known architect of Rio wrote thus about Oswaldo Faria the great inventor, our confrere:

« Oswaldo Faria's invention is really, if we are to believe the news that are reaching us, a most lucky discovery and is destined to revolu-

tionize the electrical mechanics, industry and economy.

It is no more or less than a transformer of the alternative currents into continual currents. This transformer is at the same time a regulator of power, which permits, or rather, originates a series of new applications for the electric currents. It is the solution of the most sought of problem by electrical experts.

Its author until now has reduced these new applications only to seven, and among these are more prominent, the suppression of special works and machinery to produce ozone, the suppression of special apparatus and shops to charge the accumulators, the enormous and most sought of advantage of becoming fix and steady the light of the are-light lamps, which, as it is known, has been from its beginning till now very imperfeet. That fixidity of the electric light produced by that lamp gives to the vitascope views a firmness which they never had until Oswaldo Faria's invention appeared and parties who were present at the experiments of the vitascope with Faria's regulator, assure that the views are absolutely firm and that the absence of that inconvenient trembling observed until then in the reproduction of the views of the vitascopes, is complete. The invention of the young Brazilian promises to regulate the power of the light, either in the are-light lamps, the incandescent one, what offers the advantages of the ordinary lamps being able to furnish light weaker or stronger, at will.

The same apparatus originates other important improvements. We may say it is going to revolutionize in an extraordinary way the electrical production under its varied forms of light and power.»

Through the intervention of His Excellency Barão do Rio Branco, Secretary of Foreign Affairs, Dr. Piza e Almeida, Brazilian Minister to France, in Paris, gave the aid of his prestige to safeguard the interests of the young inventor, protecting his rights, and to that effect had experiments made by experts of recognized competency.

The repercussion of this discovery in the European scientific world was such, that the French government wanted to offer the young inventor the graduation diploma of one of its Academies.

Dr. Vidal Brazil. — This inventor has followed quite a different kind of investigations from the others above mentioned. His name is connected with one of the most precious discoveries of the medical science and most important to the life of the rural population specially those who work in the field or in the woods.

He has discovered the antidote against the ophidic poison. Some time ago, another Brazilian, Dr. Lacerda, discovered a preparation having as basis permanganato of potassium, which was a most useful remedy when applied in time for the bites of certain ophidions. Dr. Vidal who is at present the director of the *Instituto Serumtherapico*, of S. Paulo, gave the last word applying the *serundherapy* to the cure of snake bites, and in Brazil there is a large number of mighty poisonous ones. Dr. Vidal had to make experimental studies most accurate and rigorous during several years.



VIDAL BRAZIL

In all the medical centres, investigations of this kind have progressed but little, to be precise, have note advanced any.

The same is not the case in Brazil. In this country there are many kinds of snakes, some most poisonous ones and quite a number of men fall victims to them as well as do domestic animals in several regions of the country.

To avoid this evil which until then had resisted to the efforts of physicians and quacks, Dr. Vidal Brazil has discovered that remedy with serums prepared by him of three different kinds: the anti-

crotalic, against the bite of rattle-snake, the anti-bothropic, against the bite of the jararaca-snake, and the anti-ophidic, formed by the mixture of these two against the bite of the other kinds of snakes.

This way Dr. Vidal put well in evidence the name of Brazil in the medical world, and giving credit to the institution he is director of in São Paulo.

Another Brazilian invention, though not of great scientific value as the preceding ones, is the *inviolable seal*, invented by an employee of the Post Office, Mr. Marques de Souza, charged with the branch of the Post Office in the Federal Congress Building.

It consists in a kind of a bolt or lock made of card and lead and in which after closing mail bags, envelopes or any other postal package, by means of an ingenious apparatus could be printed any signals, dates, numbers, anything wished.

The simplicity of the invention can only be compared with its practical use and [efficiency for the work, as it is proving its real value in the post-offices of the country. Soon after it was patented, it was adopted by the post-office administration and it can be seen that before long the *inviolable scal* invented by Mr. Marques de Sonza will make disappear from all the post-offices, the use of wax, muci-

laged seals and all the other primitive processes used until now to assure the inviolability of the mails.

Besides this seal and an original mail bag to carry the mails from port to port, Mr. Marques de Sonza invented several other devices among which is the Brazilian Grenade, a war projectile, submitted not long ago to the appreciation of the Major-State of the army, and the characteristic of which consists in that, much to the contrary of what happens with all the other projectiles used, it is open, that is, it has a longitudinal opening ramified with three lines running in the direction of the drilled rays of the inside barrel of the gun. The air introduced in these openings when the projectile is in motion it escapes, impressing greater velocity to it and more penetrating energy.

Should we have time and space we could give a long series of inventions, discoveries, scientific applications, etc., of our days, all, the work of Brazilians, but the list would be rather long. We would have to speak of:

Freire de Aguiar. — New process of manufacturing extracts of hull.

ANGELO BORGES. - Rotative motor engine.

Marao Ferreira. - New flat-irons.

R. DE CARVALHO. — New process of metal steneil work.

Antonio Salles Ferreira. — Improved eoffee-pot.

Benvindo A. Brandão, of Rio. - Hydrometre.

Francisco Gonçalves Ribeiro, of São Paulo. — Improved coffee sheller.

Bernardo Cagmari, of Rio. — Paste board made of peri-peri fibre.

D' Francisco Cintra, of São Paulo. — Apparatus for trigonometrie calculations.

José Vincente Marella, of Rio. — Acetylene gasometre.

OCTAVIO TEIXEIRA MENDES, of São Paulo. — Cooler by compressed air.

Augusto Barbosa da Silva, of Minas Geraes. — New process for the manufacture of pig iron, steel and an electric oven for that purpose.

João Figueiredo Rocha, of Rio. — Mechanic-explaining map for the study of geography.

J. A. da Silva Gouveia, of Rio. — New style flat-iron.

A. Costa Sampaio, of Rio. — Oiler to prevent rust.

Isidoro J. Machado Lapa, of Rio. — Acetylene apparatus for light-houses.

Antonio F. de Carvalho, of Rio. — Disinfecting machine for barbers instruments.

Carlos M. de Lacerda, of Rio Grande do Sul. — New process to prepare dry salted beef making it unchangeable.

DIAS DE OLIVEIRA, of Bahia. — Apparatus to lift heavy weights from the bottom of the sea.

João T. Vasconcellos, of Rio. — New night lamps named « Brazileiras ».

Maximo P. de Carvalho, of Minas. — Horse-shoe nails, named « Brazil ».

MIGUEL A. BRUNO, of Rio. — Original drink with therapeutic application.

Antonio F. P. da Fonseca, of Rio. — Ingenious device called : « Automatic Fisher ».

José Emilio Reichardt, of Rio Grande do Sul. — Apparatus to cut elothing named « Adjusting Ray ».

EDUARDO J. S. PROENÇA, of Rio. — Fishing apparatus.

JOAQUIM LEOCADIO FREIRE, of São Paulo. — New system to produce sugar, by means of the air and heat.

Augusto C. S. Telles, of São Paulo. — Utilisation of the residue of aramine to manufacture paper, etc.

EDUARDO GOMES FERREIRA, of Rio. — Improvement in cotton weaving, linen, etc.

MANOEL ANTONIO GUIMARÃES, of Rio. - New earriage models.

ARTHUR O. F. RANGEL. of Rio. — Photographs by a new process called « celluloidinos » and an Electric Drill.

Luiz Freire de Aguiar, of Rio. — Sanitary apparatus named « Simplex ».

EDUARDO GOMES FERREIRA, of Rio. — Improved weaver's shuttle. André Framů, of Rio. — Substance and process to tan skins,

OSCAR SPALDING, of Rio Grande do Sul. — Machine to serape Mandioca. (A Brazilian plant out of which flour is made).

João Vasques, of Rio. — A very curious lamp named «Progress. » Germano E. Vidal, of Rio. — Industrial advertisements by means of stereoptican views.

Manoel Gomes, of Rio. — Incandescent alcohol street lamps.

Carlos Silva. — Original stove.

named « Framã preparation ».

RAUL DA F. RIBEIRO, of Rio. — Station indicator for railway service.

Pedro A. Borges, of São Paulo. — Ant-killer machine.

Pedro Peregrino, of Rio. — An apparatus maned « Flexemoto », to neutralize the shaking of carriages.

B. F. Costa e Sousa, of Rio. — A process to cool the air suddenly. Affonso C. Seabra, of Rio. — A motor turbine.

Dr. Francisco Mourão, of Minas Geraes. — Application of manganese and its compounds to a ceramic paste.

Bento M. Sa, of Rio. — Machines to clean knives and forks.

ARTHUR D. LAGERDE, of Rio. — Process for cloth to become impermeable.

Bernardino $\hat{\mathbf{A}}$. Soares, of Rio. — Motor by means of compressed air.

Affonso dos Reis, of Rio. — Machines for wall paper manufacturing.

Fernando Xavier da Silveira, of Minas Geraes. — Brick making machine.

Joaquim Lourenço Ribeiro, of Paraná. — Hydraulie automatic motor.

Antonio Ayres Ferreira, of Rio. — Traction machine.

Dr. Jeaquim Leocadio Freire, of São Paulo. — Improved distiller.

João Nogueira Malheiros, of Rio. — New maritime vehiele, named « Velo-helice ».

Dr. Francisco Alves de Lima, of Rio. — Air pump, for land and sea.

And an endless number of others, which proves the inventive energy and capacity of the present generation.

It would require two large volumes to describe, even in a concise form these discoveries and inventions. By what we have written, by what we presented in the above lines, we can affirm that the time is gone when the dense forests, the indians, the missionaries and the slaves were the essential subjects of the Brazilian social scenery, the common reference places for the European traveller to write about Brazil as a large lot of tame savages.

Now, let us have a look at Brazilian investigators, scientists, thought workers, etc.

* *

Among the Brazilian men of science the following names occupy pre-eminent places:

BARBOSA RODRIGUES. — Is the name of the learned director of the Botanical Garden, author of several important photographic mono-

graphies, a work in two volumes « *Muirakytan and the Symbolic idols* », and many other works, the most noted of which being a elever treatise on palm-trees, entitled « Palmeiras do Brazil », a work for the publication of which the Brazilian Congress voted an appropriation of 200:000\$000 or about seventy thousand dollars.



BARBOSA RODRIGUES

Dr. A. J. Ferreira da Silva, professor of the Polytechnical Academy of Oporto, Portugal, writing about this Brazilian scientist, who devotes all his spare moments to botanical and ethnological studies stated: «Make a great mistake those who are thinking that Brazil is indifferent to the civilising progress of the world, characterised by the development of sciences. An impulse of no small importance has been given, and we can even assure that it will be one of great future possibilities, if the Brazilian Government does its duty.

João Barbosa Rodrigues represents one of the most valiant impellers of that movement of scientific emancipation in Brazil. His magnificent botanical studies, especially about parasites and palmtrees give him one of the most distinguished places among the botanists and his ethnological studies have thrown light on many problems concerning the races of the American continent».

Barbosa Rodrigues is the type of a true friend of science: he never devoted himself to nor allowed himself to be attracted by any other thing but scientific researches. In 1871 he entered the Amazon valley to study the forest. He lived there for years. He then founded the Bonatical Museum of Manaos, and from there he was invited by the Federal Government in 1890, to take charge of the Botanical Garden of Rio de Janeiro, where he introduced thousands of new plants, classifying every one he found there. Twice European men of science perpetuated his name in botany, as a recognizance of his scientific work: they classified a genus of the palm-tree family a Barbosa and a genus of parasites a Rodrigueziella. Besides these there are some ten other species devoted to him bearing the name of the wise Brazilian. He has gone over every bit of the Brazilian territory in his scientific excursions.

In 1884-1885 he pacified the Indian tribe of the *Erichanás*, that he met with and was highly praised by the Brazilian press.

His work on parasites was highly appreciated by European scientists. In the International Botanical Congress, held on the 9th. September 1892, where the celebrated professor Cogneaux sent a great number of drawings from Barbosa Rodrigues manuscript a letter was read in which the well known professor had written:

« It was then that, at my persistent requests, Mr. Barbosa Rodrigues, promised me all his collection, consisting of nearly nine hundred colored drawings. »

And the letter ends thus:

« Some of these drawings that I took, at hazard, will permit to appreciate the artistic talent with which those drawings were made, and above all, the great care with which the minutest details of the analytical drawings of this rich and precious series were represented.

Closing these lines a comparison imposes itself before my mind, between the behaviour of the two old competitors to the editing of the parasites monography for the « Flora Brasiliensis »; a (Reichembach son) revenged himself for having been set aside, ordering, by his death, that his important collections should be closed during 25 years, so that they could not be utilised in the editing of the work; another one (Barbosa Rodrigues), though he could not have been selected because of the position in which he was placed, he wanted however to render services to science and permitted me to utilise the best way I could the fruit of his active researches during many years. I believe that this latter botanical scientist will thank his abnegation, and from my part I take advantage of this opportunity to publicly present my most profound gratitude. »

He has also some works of great value on experimental physiology. His study on the *curare* was the most interesting that has been done in Brazil. A monography on « Fecundação vegetal » is equally one of the most noted works on experimental physiology in Brazil.

Often have researches made by Dr. Barbosa Rodrigues appeared in Europe attributed to other learned men, as it happened with professor Aberdeen, J. W. Trail, to whom Barbosa Rodrigues had to write revindicating the right of priority in the classification of certain vegetable specimens, as well as with professor Drude, later on, when he wrote about palm-trees in the « Flora Brasiliensis ».

Barbosa Rodrigues has written many other monographies, pamphlets and books on archeology, ethnography, and several other subjects. Here is a list of these works, though incomplete, sufficient to give to the reader an idea of the productive energy of this learned Brazilian:

Iconographie des orchidées du Brésil, 1869-1882; La vallée des

Amazones, 1872-1875; Sertum Patmarum; 1872-1897; Enumeratio palmarum novarum quas valle fluminis Amazonum inventas et ad Sertum Patmarum collectas, descripsit et iconibus illustravit, 1875; Idolo amazonico, achado no Rio Amazonas, 1875; Exptoração e estudo do valle do Amazonas : rio Capini. Relatorio, etc., 1875; Exploração e estudo do valte do Amazonas. Rio Tapajós, 1875; Exploração e estudo do valle do Amazonas : rio Trombetas, Relatorio, 1875; Exploração do rio Jamundá. Relatorio, 1875; Exploração dos rios Urubù e Jatapu, 1875; Antiguidades do Amazonas, 1876-1880; Monostychosepalum, gen. nob., (Rev. de Hort.), 1877; Genera et species orchidearum quas collegit, descripsit et inconibus itlustravit, 1 vol., 1877; Estudos sobre a irritabilidade de uma Drosera, 1878; Protesto appendice ao « Enumeratio palmarum novarum », 1879; Palmeiras do Amazonas, Distribuição geographica, 1879; Attalea oleifera, palmeira nova descripta e desenhada, 1881; O canto e a dansa selvicota, 1881; Lendas, crenças e superstições, 1881; Flora da Serra do Lenheiro, 1881; Resultado Botanico de uma breve excursão a S. João d'El-Rey, 1881; Species orchidearum novarum, 1881; Notas a Luccok sobre a Flora e a Fauna do Brazil, 1882; O Muirakytan, precioso coevo do homem anti-cotumbiano, 1882; Les palmiers, observations sur la monographie de cette famille dans la «Flora Brasiliensis », 1882; Catalogo dos objectos expostos na Exposição Anthropologica, 1882; Tetrastylis, gen. nob. das Passifloreaceas, 1882; Genera et species orchidearum novarum quas collegit, descripsit et iconibus illustravit, II vol., 1882; Diversos artigos na Revista Anthropologica, 1882; Orchideæ Rodeienses et alteræ ineditæ, 1882 ; Structure des Orchidées, Notes d'une étude, 1883 ; Esembechia fasciculata, Grumary, 1883; O Muirakytan ou atiby (Revista Amazonica), 1884; Esterhazia superba. Especie nova da familia das scrophulariaceas, 1885; Rio Jauapery. Pacificação dos Crichanás, 1885; Catalogo de productos do Amazonas, 1886; A necropole de Mirakanguera (Extr. da Velloisa), 1887; O Tamakuaré, especies novas da ordem das Ternstræmiaceas, 1887; Vellosia, 1ª ed., 1887; Ectogæ plantarum novarum quas descripsit, 1887; Palmæ Amazonenses novæ, 1887; Viagens ás Pedras Verdes, 1888; A lingua geral e o Guarany. Annotações ao alphabeto indigena, 1888; O Muirakytan e o Jurupari, 1889; Les reptiles fossites de l'Amazone (Extr. da Vellosia), 1889; Decada de Strychnos novos (Extr. da Vellosia) 1889; Bignaniaceæ novæ (Extr. da Vellosia), 1889; Horas de lazer, notas, 1889; Poranduba Amazonense (Publ. da Bibl. Nac.), 1890; Os idolos symboticos e o Muirakytan, 1891; Plantas, novas cultivadas no Jardim Botanico, I vol., 1891; Vellosia 2ª ed., 1891; Vocabulario indigena comparado (Publ. da Bibl. Nac.), 1892; Plantas novas cultivadas no Jardim Botanico, II vol., 1893; Plantas novas cultivadas no Jardim Botanico, III vol. 1893; Vocabulario com a ortographia correcta, 1893; Plantas novas cultivadas no Jardim Botanico, IV vol., 1894; Hortus Fluminensis, 1894; Plantas novas cultivadas no Jardim Bolanico, V vol., 1896; Palmæ Mattogrossense novæ, 1897; Plantæ Mattogressense novæ. O Muirakytan e os idolos symbolicos (2 vols.), 1899; Tratado das Palmeiras do Brazil, 1903.



Barão de Capanema

Barão de Capanema. — Is without a doubt one of the most noted Brazilian intellectual men. He was born in Rio de Janeiro.

His life is a continual series of services rendered to his country, and it suffices to point out among them the one of having introduced in the South American continent the electrical telegraph service which were under his direction for nearly 20 years. He started his public career as a professor of physics in Rio de Janeiro. A little

before the Paraguayan war, he was one of those charged with the study of improvements to be adopted in the Brazilian army, by order of the Imperial Government. By that time the Estrella powder factory in Rio de Janeiro had been destroyed by fire and he was charged with re-establishing it. While in that commission he introduced some novelties, completely ignored in South America one of them being the Tourneiron turbine, that he himself had built in the Rio Navy Yard. He invented and installed in the factory an apparatus to carbonise wood by means of over-heated water steam. The pulverisation of the powder elements was also obtained by him by means of an ingenious apparatus also of his own invention, a very simple one but which substituted with advantage the old crushing primitive process adopted in the factory. By his own initiative were introduced in the Brazilian army the breech loading rifles, the first ones that were sent to South America.

He also invented some sky-rockets to be used in time of war, and which were used in the Paraguayan war with the best results. Those sky-rockets were of cylindrical shape and contained explosives.

But Barão de Capanema did not devote his deep genius to war

appliances only. Some years ago he conceived a chemical compound for the extinction of the Sauvas a species of ant which has been a true plague to Brazilian agriculturists. He gave it the name of « Formicida Capanema ». An enormous factory established in Governor's island in Rio bay furnished for many years tons and tons of that ant-killer to the farmers of the country. In 1893 during the Floriano revolution this factory was destroyed during one of the military engagements and with the factory also disappeared several most rich conchiologic, geologic and mineralogic and industrial chemistry collections which represented the result of 38 years of researches made by the learned Brazilian.

He made the plans and began the construction of the Rio Custom House Storage houses. He reorganised the Ipanema iron factory. He initiated an itinerary map of Brazil which could not be finished because of the Government having denied the needed funds to do it with. He was the founder of the Polytechnical Institute that has rendered such good services to the country.

As a member of the international committee for the establishment of a universal standard he was the introducer of the metric system in Brazil.

The first paper factory established in Brazil was founded by him 40 years ago taking advantage of a water fall near Petropolis.

He spent several years going through the province of Ceará to make some geological studies. He indicated there the existence of coal and iron mines. In the mountain chain known as Carisis he found the formation of cretacea. In a place known as Crato, he dug up and classified some fossils finding one belonging to the jurassic formation.

Later on he directed a committee charged with the demarcation of the boundary lines that separate Brazil from the Argentine Republic as well as he represented the progress of natural sciences in Brazil in different Congresses and Conferences held in European capitals.

* *

In the medical and natural sciences Brazil has a long list of notabilities, many known abroad but the limited space of this book compels us to cite only a few most prominent. There is no doubt that the first place belongs to Dr. Chapot-Prevost, professor of the Rio Medical College. To give an account of his successful chirurgical operations which meant life and death to the operated would fill pages and pages of this book. It suffices to mention that as audacious

as skilful operation made on the thoroxiphopag sisters, Maria and Rosalina, separating them. This operation was cause of great wonder to the scientists all over the world. Dr. Chapot is about to perform an identical operation on two little thoroxiphopag girls which have just arrived from Ceará at the translating of this book.

Other prominent medical men are Barão Pedro Affonso; Dr. Paes Leme; Dr. Baptista Lacerda; Dr. Pizarro; Dr. Oswaldo Cruz, the great bactereologist and energetic Director of the Board of Health and Dr. Pereira Barreto the wise propagandist in São Paulo.



BAPTISTA LACERDA

Dr. Baptista Lacerda. — We must write some biographical notes about this learned Brazilian very much spoken of in the scientific world of late years for his studies and researches, having discovered among other things the anti-ophidic action of the permanganate of potassium.

He was born on the 12th. July 1846 in the city of Campos, province of Rio de Janeiro.

His father, who is now dead, worked for many years as a physician in that eity having acquired a good name both for his skill and charitable disposition.

In 1864 Dr. Baptista Lacerda graduated in letters

and sciences after a brilliant course in the *Collegio Pedro II*. In 1870 he graduated in the Rio Medical College and in 1876 was appointed vice-director of the zoological section of the National Museum and later on was for several years its director.

In 1881 with the collaboration of L. Conty founded the physiology laboratory of the National Museum the first institution of its kind then in Brazil.

He published several works of value about anthropology, physiology and microbiology.

In the same year 1881 he discovered the antidotism of permanganate of potassium for the poison of the ophidion. This discovery gave him a good name not only in Brazil but in foreign countries. The Imperial Government condecorated him with the title of Commendador da Rosa, and he received a prize voted by the Parliament as a compensation for his humanitarian discovery.

During two years he was president of the Medical National Academy and in 1895 was appointed director of the National Museum.

He was charged with several scientific committees, in Brazil and abroad, and several times he was honored with the nomination of vice-president of foreign congresses.

He is corresponding-member of many scientific associations both national and foreign.

He wrote several papers on the yellow fever, beri-beri and symptomatic carbuncles in Minas Geraes, the curare, on some Brazilian toxic and medicinal plants. Reforming the National Museum he reconstituted there the Biology Laboratory the direction of which he took charge regardless of any compensation.

He is one of the Brazilian men of science most known abroad.

About the learned man Pereira Barreto, that we mentioned above, it would not be exaggeration to say: there is one of the giants of the thought in South America. This noted physician was born in the old province of Rio de Janeiro, but after graduating in medicine in Brussels, established his residence in São Paulo contributing as few have towards the moral and material progress of that state and the country. He is an earnest and active experimentalist of industrial and agriculturist biology.



Pereira Barretto

He is the author of that theory that the epidemic fevers of some localities of São Paulo are due to the conspurcation of the sheets of water, theory originated after the most warmly debated controversies, the series of measures taken for the improving of the sanitary conditions of those places, the drying of the soil, having thus São

Paulo improved and transformed the majority of its cities in the last 15 years.

Another large part of the good work of that man of science was the campaign of rehabilitation of the weak soil, in São Paulo. He resolved then several problems of public economy, the populating of several districts and the multiplicity of culture. The latter because of the State farmers devoting themselves to the cultivation of coffee exclusively. The large agricultural establishment he founded as an experimental demonstration of his propaganda, it is to-day a good school for all those of that region who devote themselves to such questions.

Dr. Luiz Pereira Barreto maintains an earnest propaganda for the introduction of the vines in Brazil. His farm in Pirituba near São Paulo is transformed in a large demonstration field where the precepts of the scientific cultivation, preached by the propagandist, in successive works, have their best illustration and the most eloquent in thousand kinds of vines, coming from all over the world, and there they are acclimatized and blooming.

He is also a philosopher.

Sociology and philosophical critic take up the balance of his spare time, after attending to his medical work, the agriculture and journalism.

Among his books and articles published in the Belgium, French and Brazilian papers has acquired a just reputation his book « The theory of the three States », which provoked endless and animated discussions and is a vigorous book of philosophical critic.

But we can't delay any longer with this chapter. We must go ahead! There is a good deal to be written.

DR. LAURO SEVERIANO MÜLLER (Secretary of Industry and Public Works). He is the youngest of all the members of the Government. Was born in the province of Santa Catharina in 1864. He is a man of superior mind, has a strong will power, is ealm, persistent and determined. He soon took a prominent place among the politicians of note, though he does not resemble them at all, detesting as he does politics.

We may say of Dr. Lauro Müller what H. Taine said of one of his fellow-citizens: he prepared himself for politics through sciences and morals. He is an enemy of all this: quarrels, conspiracies, disputes and little subtilities, that constitute as a rule the profile of politicians by profession, here in South America, Dr. Müller never

wanted to understand that the object of the preoccupations of a public man were limited by eternal quarrels of the political parties and elections disputes. His military education, — he is a major belonging to a military engineers company — his scientific instruction, explain fully well the reason why he places before the eogitations of the party, before the unending manœuvres of internal poli-



LAURO SEVERIANO MÜLLER

ties, a persistent care and he never gets tired of looking after the material progress so much needed by this as well as all the other countries of Latin America.

Due to this particular characteristic he has been elected in spite

of political differences by all political parties of his native State indistinctly. He has represented his State both as a Congressman and a Senator and was nominated candidate and elected governor.

It was while he was Governor of his State that Dr. Rodrigues Alves invited him to assist him in fulfilling the programme of work and material progress that he had promised to the nation.

Magnificent selection it was. For a long time Brazil has not had a man like Dr. Müller and he will be replaced with difficulty should he not be invited to continue to serve with the new president as it is rumoured.

Dr. Müller is not only a man of good judgment and progressive ideas, but he is a hard worker, energetic and the work of his department is going on under such an active management that many call him Yaukee. He visited several points of the country, he opened new railroads, he called meetings of scientific Congresses to examine de visu questions of importance in charge of his department and last but not least he opened the Central Avenue, Bay-side-drives, contracted the harbour works, called experts from the United States to study the future possibilities of the coal mines regions and others.

It is to Lauro Müller principally that Brazil owes the starting stream of investing capital inclined to come from the United States to Brazil for the benefit of both, the capitalist who will multiply his eapital and Brazil that will develop its industries. Dr. Müller is a hard worker and he supervises and investigates personally everything of interest running through his department.

Though every one of the Secretaries of the Government have been attentive to the work of their departments, Dr Müller has been particularly so. He does not confine himself to go to his office, give orders and sign papers. He inspects railroads, examines mines, studies agriculture problems and is a tircless worker.

Another characteristic of Dr. Muller's moral profile is the little importance he attaches to what the papers say about him, either in his favor or against him. And was a newspaper man himself one day. He is a clever orator; we often heard him speaking in Congress. He despises theatrical effect in his speech. He is discreet and the delivery of his speech is slow and calm. He is, however fond of a little humorism which is the basis of a good practical sense. He was always listened to with considerable attention.

As a Secretary he has been more a man of action than a man of words. When he took charge of his office instead of looking for his political friends and political bosses, he went to the technical centre of engineers and scientists where he had occasion to declare that

« in the government he would make engineering work » and this phrase became eelebrated and with some reason because there were quite a number of civil engineers struggling for lack of work and the material progress that Dr. Müller has developed during his term of office brought work to the majority if not all of them.

Secretary Müller has done during the four years of his administration 1902 to 1906 everything that could be expected from a good administrator of public affairs and a clever and wise man that he is. When he took charge of his Department he found the railway system almost paralyzed all through Brazil. He went to work and not only gave new life to the lines in operation but created new ones. He built some 14 to 17.500 kilometres of new roads and there are contracts signed for the building of 5.000 more kilometres.

But it was not only in this line that he developped his activity. He also looked after the mining districts. He contracted from the United States, Mr. J. C. White, a mining engineer who made two trips to Brazil for mining studies, specially the coal industry. Thus Secretary Müller has promoted the industrial exploitation of the coal mines so rich and yet so abandoned in Brazil. He also reorganised the New Brazilian Lloyd Steamship Company which was going to pieces. Now that company is in the hands of the firm M. Buarque & Co. The head of that firm Dr. Manoel Buarque de Macedo is one of the most clever of the Brazilian captains of industry and now the Lloyd is becoming a modern and powerful enterprize devoted to the coastwise service and international navigation under the Brazilian flag.

Secretary Müller also contracted the Rio Grande bar improvements, a problem which has been waiting for centuries to be solved. He also solved the other no less difficult problem of the internal communications whith Matto Grosso, by means of a 1.200 kilometres railway. He promoted yet the great achievements of the Harbor Works of Rio de Janeiro, Bahia, Rio Grande, Vietoria, Recife, Pará, Florianopolis and Laguna. He put an end to that endless complaint of unsufficiency of water supply in Rio de Janeiro, through canalisations from far away rivers. He solved yet the problem of the supply of electric light and power for the industries and city illumination. He ordered the construction of artisian wells and penetration roads, a system of public works to prevent famine in the States that lack irrigation during the dry season. He increased the federal telegraph lines more than 4.000 kilometres. He promoted the first industrial census ever taken in this republic and got interested in everything that contributed towards making Brazil

better known abroad. It is not necessary to write here the good results obtained there from. It suffices to mention the St, Louis Exposition where Brazil presented a beautiful exhibit. The country owes to Secretary Müller the important improvements Rio de Janeiro is undergoing as the destruction of some of the hills, the prolongation of the Mangue Canal with its two avenues, a permanent Museum, the Central avenue, the uniformisation of the width of the Central Railway of Brazil tracks and many other improvements.



Paulo de Frontin

Paulo de Frontin. — André-Gustavo-Paulo de Frontin was born in Rio de Janeiro in 1860. He was but 19 years old when he graduated as a geographic engineer from the Rio Polytechnical College. One year afterwards he was a professor of that same college. Later on he graduated as a Bachelor of Mathematics and Physical Sciences and Civil Engineering. In 1882 he obtained by competitive examination, which he passed with high distinction, the place of steam machinery professor at the Polytechnical College. He was teaching at the same time philosophy at the Pedro 11 High School and mechanies and astronomy at the National Gymnasium. He has realized some most notable pieces of engineering work, railroads, water works, etc. Among this we must mention the Gold mines of Assuruá, in Bahia, 40 kilometres canalisation; the bringing down to Rio the waters of the Xerem and Mantiqueira rivers, for the capital water supply, work that made him a celebrated man; the Melhoramentos of Brazil railway 159 kilometres that he studied, projected and built all alone in 5 year; the project of the port and docks of Rio; the plan of modifications for the improvement of the sanitary conditions of Rio, opening avenues and throwing down hills, and



Francisco Bicalho

many other works of importance. The opening of Avenida Central in Rio which was executed in 22 months perpetuated his name. He is a man of rare intelligence and phenomenal capacity for work and is, without a doubt the ablest engineer of South America.

Francisco Bicalho. — He is one of the most notable civil engineers. He was born on the 18 th. July, 1847 in S. João d'El-Rey, in the State of Minas. He graduated in 1871 as a Bachelor in Mathematics and Physical sciences, and Civil Engineering from the Rio de Ja-

neiro Central College. In 1873 he was appointed chief engineer of

the Mueahé and Campos Canal. In 1874 he was appointed chief of the traction department of the Pedro II Railway. After that he has filled the positions of engineer of the Baturité railway, first engineer of the eelebrated contractor Gabrielli, engineer of the Pedro II railway prolongation, director of the new water supply works in Rio, engineer of the central railway of Brazil, director of the hydraulic section of the Public Works department, engineer in charge of the project for the construction of a Custom House in Juiz de Fóra and director of the public works of the municipality at the same time, and afterwards held the same position in Bello Horizonte, where to they moved the State of Minas capital. Now he is directing the Mangue canal works which is a complement to the Harbor works of Rio de Janeiro. Dr. Bicalho is one of the most notable professional men of Brazil.

J. Murtingo, - He is one of the best minds in Brazil. He was born in Cuyaba, Matto Grosso, in 1848. He graduated in engineering, law and medicine. His notoriety is due to the latter aptitude. He has no rival in Rio that can come near him in Homeopathie treatment. He is one of the few foreigners who was admitted to the group of the Hahnemanians, of New-York, and the only South American that has had that honor. He is a notable man also as a biologist and his knowledge of geometry is deep. Some years ago attract-



J. MURTINBO

ed by polities was Secretary of Public Works, later on Secretary of Treasury (1899-1902) where he introduced original theories of his own with the applause of European men, like J. Gnyot and Herbert Spencer and European papers, like the *Financial News*, the *Times*, the *Independance Belge*, etc. To-day J. Murtinho is a Federal Senator and as a statesman he enjoys in Brazil a great prestige. He is one of the liveliest intellectualities of to-day.

VIEIRA SOUTO. — Another strong member of the mental aristocracy of Brazil. He was born in Rio and is professor of the Polytechnical College where he teaches political economy. He is a scientific man and one of the leaders in the present progressive movement in Brazil. He is director of the protectionist school and chief of one of the sections of the improvements that being executed to modernise the city of Rio.



CARLOS MOREIRA

CARLOS MOREIRA. -Is one of the most notable scientists of South America. He was born in Rio in 1869. There he studied, becoming prominent for his aptitude for natural history investigations. He is a Zoologist, an entomologist and he has devoted himself to patient studies on the elassification and habits of Brazilian insects and his collections are disputed at high prices by the European specialists. From 1895 to 1904 he did study deeply Atlantic ichthyology and his works have found a place in the Annals of the Rio Mu-

seum. He travelled through all the South in commission with the geologian engineer White. Carlos Moreira while only 19 years old was already a draftsman and shortly after preparator of natural history of the 1st. section of the National Museum of Rio, of which he is even to-day the vice-director. From his works we mention the following translated into other languages.

CONTRIBUIÇÕES PARA O CONHECIMENTO DA FAUNA BRAZILEIRA.

Crustaceos do Brazil-Thoracostraceos, v. XI of the Archives of the Museu Nacional do Rio de Janeiro. Nota appendice á publicação anterior, v. XII of the Archives of the Museu Nacional.

Crustaceos da Ponta do Pharol em S. Francisco do Sul, Estado de S^{ta} Catharina, v. XII of the Archives of the Museu Nacional.

Vermes Oligochetos do Brazil, v. XII of the Archives of the Museu Nacional.

Uma especie nova de Amphipode Orcheotideo que vive a 2240 m. sobre o nivel do mar, v. XII of the Archives of the Museu Nacional.

Campanhos de pesca do « Annie » Crustaceos; estudos preliminares. A « Lavoura », da Sociedade Nacional de Agricultura nºs 1 to 3 of 1903.

Campanhos de pesca do « Annie » Crustaceos, v. XIII of the Archives of the Museu Nacional.

Relatorio das excursões ao Rio Branco em S. Paulo e ao Italiaya, v. XII of the Archives of the Museu Nacional.

Contra os inimigos, « Lavoura, » v. 2 serie agosto de 1899.

THINKERS AND WRITERS

For a large country like Brazil the list of its deep thinkers and writers is quite a long one and represents a gathering of intellectualities who do honor to South America and would constitute the motive for worthy pride should they belong to any European nation.

Keeping; however, within the limits we mapped out for this book, we will only mention the facts and the men of to-day writing of nobody else but contemporary eelebrities.

Ruy Barbosa. — Of all the Brazilian litterary men, of all philosophers of the age, of all the great thinkers and authorities in law and statemanship, we can say without fear of making a mistake that Ruy Barbosa is in first place. This assertion of ours is perfectly useless, should this book be published to circulate only in Brazil, as everybody in this country knows he is second to none in the whole nation. He is, to be sure, a good specimen of intellectual superiority and the true type of the moral blooming of the social surroundings where he moves.

It can be said about him, most appropriately, just the same that II. Taine said of a philosopher of his age, Mr. Royer-Collard : « As

to knowledge or behavior he does not lack any natural accomplishments which confer the title of authority: he was born a conqueror a dominator of the mind of others ».

We can speak of Ruy Barbosa intimately as we have had the good fortune for some time past of enjoying his pleasant sociability and we have been able to study that great difference that goes from the home intimacy to the public life at large. So we have been able to observe him closely, to sound his moral organisation, if we may be permitted to thus express it. And the result of those observations is, that we believe, every day with stronger faith, in the predestination of the Brazilian people.



Ruy Barbosa

Writing in the most impartial way of Ruy Barbosa, we can assure that he adds to the most astounding and deep knowledge a moral nature affirmed by all the prestige of an exemplary behavior. He is a whole personality before the public - who often do not understand his intentions — just as they would before his own self, in his own home. He has that politeness and sensibility proper of the first phase of life in spite of his forty years contact with society, which the multiplied role he has been called to perform in the country, as a lawyer, a senator, a statesman, and other capacities, has afforded him to observe it through all its imaginable features. With a good

experience in journalism, politics, courts, each one of them quite sufficient to spoil the purest of natures, Ruy Barbosa is not only a learned man but a good and honest man as well.

His knowledge is varied and he has shown it well in every branch of human activity: in mathematics (of which he has a manuscript treatise), in medicinal science, in public, private and international law, in history, religion, finances, strategies, diplomacy, sanitary legislature, pedagogy, parliamentary speaking, and others.

A list of his works will speak better for the varied capacity of this polygrapher and thinker: Crime against industrial property, Bahia, 1874; Chief of the custom House Inspectors defense, Bahia, 1879; Rochu Vianna's defense, 1880; The street prolongation, two

volumes (a treatise on disappropriations for public use), Rio, 1887; Crime review, Rio, 1888; C. Monsegur's mercy petition, Rio, 1888; The state of siege, its nature, its effects, its limits, Rio, 1892; Unconstitutional acts, etc., Rio, 1893; Religious liberty, Rio, 1876; The Pope and the Council, (translation and introduction), Rio 1877; Instruction reform, Rio, 1882; Primary Instruction reform, 1883; Slaves emancipation, 1884; Lessons of things, 1866; Direct election, 1874; Castro Alves, Bahia, 1871; The Marquis de Pombal, 1882; Drawing and industrial art, Rio, 1882; Jose Bonifacio, São Paulo, 1877; The political year, 1887; - Swift - 1888; The Provisional Government, Rio, 1891; The servile element; lectures on slave freedom; the situation of slave freedom; commemoration of the 7 th. September law 1831; The freedom of slavery in Brazil; Homage to the Dantas Ministry; Republican finances and politics, 1891; Letters from England, Rio, 1896; The conservative party, Bahia, 1896; Visit to the native land, Bahia, 1895; Inverse Annisty, Rio, 1897; Opinion on the Civit Code, Rio, 1902; Answer to the defenses, etc., Rio, 1903, etc., etc.

But where we can better study the capacity of this great man is in his journalistic work, spread by the different dailies and magazines, the *Diario da Bahia*, *Diario de Noticias*, of Rio, *Jornal do Brazil*, and *Imprensa* where we worked with him in 1902. All this journalistic work constitutes a solid bibliography, which future generations, will surely collect and publish in a complete edition, as the best and most beautiful litterary monument received from the present age.

Amaro Cavalcanti. — He is a Statesman, a financial writer an author and a jurist. He was born in Rio Grande do Norte in 1849. When only 20 years old was a professor of languages and founded the public library of Baturité. He graduated from the Albany Law School, of New-York. Later on he was principal of the Lyceum of Fortaleza, capital of Ceará State and Director of the Board of Education in the same city. From there he went to Rio where he has been a lawyer, a professor, a journalist, and a politician after the proclamation of the republic. Since then he has become a notable man. He was a Senator in the Constituent Congress after the proclamation and in the first ordinary legislative session. When his mandate ended he was appointed envoy extraordinary and plenipotentiary minister to the Plate Republics. Later on he was Secretary of Justice and Public Instruction, juridical counsellor of the Foreign

Relations Department, etc. He enjoys an excellent reputation all over Brazil. He published the following works:



AMARO CAVALCANTI

A Religião, Ceará, 1874; A Meus Discipulos, Ceará, 1875; Livro Popular, Ceará, 1879 and New-York . 1881 : Educação Etementar nos E. Unidos da N. America, Ceará, 1881; Noticia Chronologica da Educação popular no Brazil (incomplete), Ceará, 1883; Ensino moral e religioso nas Escolas Publicas, Rio, 1883; Meio de desenvolver a instruccão primaria nos municipios ruraes, Rio, 1884; The Brazilian Language and its agglutination, Rio, 1884; Finances (du Brésil), Paris, 1889; Resenha Financeira do ex-Imperio, Rio, 1890; Projecto de Constituição de um Estado, Rio, 1890; A

Reforma Monetaria, Rio, 1891; Politica e Finanças, Rio, 1892; O Meio Circulante Nacional, Rio 1893; A Situação Politica ou a intervenção do Governo Federal nos Estados da União, Rio, 1893; Elementos de Finanças, Rio, 1896; Tributação Constitucional, Rio, 1896; Regimen Federativo, Rio, 1900; Sobre a unidade do direito processual (Relatorio ao Congresso Jurídico Americano), Rio, 1900; Direito das obrigações (Relatorio sobre os arts. 1011-1227 do Proj. do Cod. Civ. Brazileiro), Rio, 1901; O Arbitramento (no direito internacional), Rio, 1901; Taxas Protectoras nas tarifas aduanciras, Rio, 1903; Responsabitidade Civil do Estad, Rio, 1905; and many other litterary, political, economical and other works.

Barão do Rio Branco (José-Maria da Silva Paranhos) (Secretary of Foreign Affairs). It is a name known esteemed and respected by two generations of Brazilians.

His father was one of the most illustrious statesmen of the Brazilian Empire, and from him his son inherited the highest qualities as a diplomat respected in Brazil as the ablest man in international questions.

The Baron is 56 years old. He made his preparatory studies in the Pedro Segundo School where he studied with distinction until the 5th. year. He entered then the São Paulo Law College where he was graduated. He always revealed himself a man of advanced ideas fond of progress and work. He abhors all domestic petty questions of the political parties and devotes himself entirely to litterature and sciences.

He took his first praetical lessons in diplomacy with his father who was Minister of Foreign Affairs and later President of the Cabinet at the time of the Empire.

He was elected deputy to the Lower House by Matto Grosso province which his father was then representing in the Senate. He was a journalist and editor of « A Nação » with Dr. Gusmão Lobo.

When Admiral Grenffel died Barão do Rio Braneo was appointed Consul General in Liverpool, in his stead.



Barão de Rio Branco

While there he was sent by the Government to defend the interests of Brazil in the Arbitration Tribunal at Washington. After that he was the stern defensor of Brazilian rights in the boundary question of Oyapoek. Two extraordinary victories.

The remarkable services rendered to the country in these two glorious missions and on his return to the country he received a public manifestation as few have taken place in Brazil.

From Berna he went to Berlin as Envoy Extraordinary and plenipotentiary Minister, from which office he came to Rio as Secretary of Foreign affairs. In this high office he has rendered great services to the country. The acquisition of the Acre region, which was

in dispute was the one that proved his wisdom and fine tact as a stateman. He also solved and is solving with equally ability, settled and pending questions with Bolivia, Perù.

During the short time of office, as Secretary of Foreign Affairs his work has shown many and good results in favor of Brazil acquiring for this country a large amount of international prestige as it is clearly proven by the creation of the North-American Embassy, in Rio de Janeiro, the concession of a cardinal, Rio de Janeiro being the first South American capital to have one, the termination of all the boundary questions, the many treaties with the object of closer commercial and diplomatic relations as well as arbitration treaties, being worthy of special mention those with American nations. Barão do Rio Branco is most justly had as the ablest stateman of South America having hold the office of Secretary of Foreign Affairs in this continent.



ARTHUR ORLANDO

ARTHUR ORLANDO. — He is a jurist, a writer, a news paper man. He was born in Recife in 1858. He graduated from the Law College of that city in 1881. His first work of note was the Philocritica, 1886, a 220 page volume. He has been the editor of the Jornal do Recife, the Revista Brazileira, the Provincia and at present the Diario de Pernambuco having already represented his State in the Federal Congress in more than one legislature sessions. His principal works are, besides the one above mentioned: Men Album, 1891; Propedentica Poli-

tico-Juridica; Ensaios de critica, 1904; Novos Ensaios, 1905; Memoria ao Congress Latino-Americano, 1905.

Arthur Orlando is an original thinker he is a member of the Litterary Academy of Recife.

Another philosophic brain is Sylvio Romero, who has distinguished himself mainly by his analytical works on Brazilian mental evolution. He wrote the History of the Brazilian Litterature, which is a true monument of scientific criticism applied to the study of Brazilian litterature, under all its features. He possesses a spirit of action which fights and builds, that works and assembles, so that among Brazilians he has become the most noted ensign-bearer of that new flag



SYLVIO ROMERO

of superior and elever nativism filled with pride for his country, his race and their history. He preaches peace, work, solidarity, haughtiness, and confidence in the country's destiny. That spirit, which I will call — spirit of intellectual nationalism — dominates all the work of Sylvio Romero, giving it a social and positive character, which distinguishes it so strongly from that of any other Brazilian writer and philosopher. He is a true and sound polygrapher. He has written on jurisprudence, philosophy, art criticisms, ethnography, history, litterary criticisms, politics, national folk-lore investigations, poetry, etc. These works, though apparently not associated, are, nevertheless constitutive parts of one only whole, needed implements of one single work, and work of the greatest cohesion and homogeneity, broad work, deep and complete in its conception and in its object, animated all through by a live sentiment, subsisting on any of its pages as the atomic affinity in the smallest particle of any organism: it is the sentiment of the intellectual autonomy of the country.

The following list gives a sample of the complexity and abundance of the intellectual work of this learned man: Philosophy in Brazil, 1878; The Brazilian Litterature and Modern Criticism, 1880; Essays on Parliamentary Criticisms, 1883; Contemporaneous Litterature studies, 1884; Brazilian Ethnography, 1888; New Studies on contemporaneous litterature, 1897; Machado de Assis (study), 1897; Martins Penna (study), 1897; Luiz Murat (study), 1890; Valentim Magalhães (study), 1895; Introduction to Brazilian Litterature's history, 1882; History of Brazilian Litterature, 1888; Brazilian History told by its heroes 'biographies, 1880; National Law History

(in preparation); Popular Songs of Brazil, 1882; Popular Songs of Brazil, 1883; Studies on Brazilian popular songs, 1888; A trick! popular songs and stories of Brazil and Mr. Theophilo Braga, 1887; The Portuguese element in Brazil, 1902; Parliamentarism and Presidentialism in the Brazilian Republic, 1893; Provocations and Debates (in the press); The Evolutionism and Positivism in Brazil, 1894; Law Philosophy Essays, 1895; End of Century songs, 1878; The last harp sounds, 1883; Caxias and the integrity of Brazil, 1904.

Joaquin Nabuco. — Is another noted man, belonging also to the deep thinkers. He is as those we have just written about a good orator. He is an altruist struggler who distinguished himself most



JOAQUIM NABUCO

prominently during the propagand for the slave freedom. He never was and never will be a popular man. His personal qualities don't make him very accessible to the masses. He is a polite and noble man, He is not a nobleman because of useless and valueless titles. but because of his noble intelligence and noble character, a nobility which separates men far more than that of titles. The masses of the vicious and ignorant cannot make any alliance with the superior types. A characteristic that shines as a star around the moral profile of Joaquim Nabuco is his patriotic gratitude (for

the sake of the old slaves), to the crown that gave them freedom. Joaquim Nabuco never was a friend of the Imperial Court, but when the Brazilian monarchy effected, with the sacrifice of its own institutions, the freedom of slavery this defender of the unfortunate considered himself enslaved by the gratitude he owed for that act

of grace and mercy devoting to the new victims all the love that survived from the former.

The recognizance of the oppressed race made him become a friend of the erown, but that was when he saw the royal family condemned to exile. When, later on, the protected friends of the erown, turned their backs to the royal family to look for beneficial advantages in the new government, they found great reasons to eritieise Joaquim Nabueo because he had accepted from the Republie a commission of patriotic responsibilities, representing the country as Minister to England without, however, repudiating his gratitude to the crown. They had forgotten that Nabuco, as every man who has reached a certain degree of superior perfection, could not identify either his fatherland or mankind with this or that transitory form of government. For this great writer and philosopher « interest, love, zeal, patriotic ardor, must be directed to the national substance - the country. » He « would never establish a dilemma between monarchy and fatherland, because fatherland could have no rival. »

These quotations are from his own book « Minha formação » published in Rio in 1900.

As a writer, J. Nabneo, observed through his works, presents himself as one of those advocates of virtue, of whom Emerson writes, and who in their apparent isolation, are yet so useful to the social community.

He seems, in fact, to be isolated from his people, he speaks to them in a quite independent language without fear of displeasing them.

« Balmaceda », « An intervention », and the other books of his, look like a defiance to the times in which they were published. « I got used to consider the historian's judgment, as a definite one, what is equivalent to saying a final one, and consequently the one we must have always in view. » This was written by Joaquim Nabuco and added: « The judgment of the masses which elevates us to-day and lower us to-morrow, that represents only the dust of the road. » In full military dictatorship, when, in Rio de Janeiro, the multitude made display of their devotion to the military work, he went to the press to claim that « Paraguayan tyranny had been revived in Brazil at the point of the same bayonets that had put it down. »

In his books transpire a little of that melancholy that Schopenhaner classifies as sound.

His books are not many but they are substantial ones: Balmaceda, Rio, 1895; Minha Formação, Rio, 1900; Um Estadista do Im-

perio, three volumes, Rio; Camões and The Lusiadas, Rio; Eleições Liberaes, Rio, 1868; Uma intervenção, Rio, 1894.



MELLO MORAES

Mello Moraes. — We will write about that active investigator of the past, a chronicler of popular traditions of Brazil — Mello Moraes Filho. — This poet and historian is a passionate lover of his fatherland, and he sees no better means of displaying these sentiments but singing in his verses its traditions shaken more and more every day by the growing europeanisation, spreaded out through the maritime cities and from there to the interior, with its new customs and

its noisy ieonoclast progress. In the middle of this transformation that drags everything and everybody, Mello Moraes is faithful to his affections sings his legends the primitive modes of popular life. He writes his chronicles with the colors of nostalgia, and in an effort that we are compelled to respect he speaks to us of the attractions of the past, fixing his passing images, those shadows of other shadows. Mello Moraes' books will survive and our grandchildren will find in them a sweeter pleasure than we appreciate, a because in them lives the great soul of Brazil, because in them he sings and plays, or groans and cries that mixture of enthusiasm and melancholy, remembrances and courage, which is the Portuguese genius transformed in America.

This was written by Sylvio Romero in a preface to M. Moraes' book « Festas e Tradições. »

We cannot give a complete list of Mello Moraes' works as a large number have been published in newspapers spreaded all over the country, yet we can point out: Cantos do Equador; Educação Civica; Festas e Tradições Populares do Brazil; Mylhos e Poemas; O Cancioneiro Popular; Curso de Litteratura Brazileira; Parnaso Brazileiro; O Dr. Mello Moraes; Cancioneiro dos Ciganos; Quadros e Chronicas; Os ciganos no Brazil, Serenatas e Saráos; Cancioneiro Fluminense; Obras poeticas. We do not include here a long and good collaboration in Rio papers on ethnography, Brazilian folk-lore, colonial chronicles, documents and memoirs.

Mello Moraes was born in Bahia, and is one of the most popular writers in Brazil.

We will now speak of Machado DE Assis, in whose enormous literary luggage we will find verses, novels, theatre, and light stories. As it is well known he started by his verses, what was far from indicating the brain solidity of the giants of the thought. What compels me to select a prominent place for this great spiritual pioneer, in my worship for the prominent leaders of the mental race, is the art with which he created, in his novels, Brazilian types of social charac-



MACHADO DE ASSIS

ter, as O Carlos Maria, o Major Liqueira, a Fernanda, o Palha, and others, which appear in his psychological novels Quincas Borba, Braz Cubas, etc.

Machado de Assis was born in the city of Rio de Janeiro. Adding to the natural talent of a stylist, an instruction which he does not cease to add knowledge to, each day that goes by, thus he became the prince of Brazilian literature. That fine humour Sterne and Lamb style, skeptical and calm, which goes through the philosophy of his books, it seems to me, makes part of his psychic constitution, translates a congenial propension.

In the age of enthusiam, when he was but 20 years old, the contemptuous rapture of the philosopher of the future, through the mouth of one of the personages he created, expressed himself this way in a poem of his entitled « Pallida Elvira »:

Depois de ter aprofundado tudo, Planta, homem, estrellas, noites, dias, A chou esta lição inesperada: Veiu a suber que não sabia nada.

(After going deep into everything, plants, men, stars, nights, days, he met with an unexpected lesson: he came to know that he knew nothing.)

It is the spontaneous melancholy, the skeptical wittieism of Thackeray, the same philosophy of the *Vanity Fair* or of the *Snobs Book*, which had to be crystalised later on in the celebrated book of his *Braz Cubas*, and never more abandoned all his works accentuating itself more and more with the age.

For this very reason, just as it happens with the work of the

Calcutta writer among the Englishmen, the novels of this Brazilian humorist enjoy a high esteem in the Portuguese literary circles.

The character of Machado de Assis' philosophy can better be appreciated in his novel Braz Cubas — and it is a compound of a half humorism, somewhat ironie, which the reader devours with a discreet smile to the last line. We affirm as did a critic speaking of Machado de Assis that « against current opinion, the best chapters of his books are those in which he reveals his qualities as an observer of customs, and as a psychologist, those qualities in which he describes Brazilian life, customs and social habits. » Machado de Assis works are read in Brazil with an interest that does not cool off and that we can see by the successive editions that appear. He has written: Phalenas (verses) Rio, 1869; Varias Historias; Memorias posthumas de Braz Cubas; Quincas Borba; Americanas (verses), 1895; Yaya Garcia; Chrysalidas (verses), 1864; Papeis Avulsos; Helena; A mão e a luva; Resurreição; Contos Fluminenses; Historias da Meia Noite; Deuses de Casaca. For the stage: O Caminho da Porta (The way to the door); O Protocollo; As Forcas Caudinas; Debaixo de Ruim Capa; O Espalhafato; Quasi Ministro; Tu Só, Tu, Puro Amor (comedies); A Familia Benoiton (translation); Montejoie (translation); Anjo de Meia Noite (translation); Barbeiro (translation); Pipelet (translation); Supplicia de uma Mulher (translation); As Bodas de Joanita; and several others.



CARLOS DE LAET

Carlos de Laet. — He is another Brazilian whose name has a place of honor among the literary men and philosophers, though like Machado de Assis, he multiplies his talent into fragments: eritic, polemics, philosophy, travels, history. In his book, « Em Minas, » Rio, 1894, the reader will get acquainted with him in the light of these different prisms of his talent. He also published A Imprensa (Republican decade), Rio, 1899; and several other works of merit both in form and basis.

Carlos de Laet was born in Rio de Janeiro where he lives in a courageous struggle as a public teacher and professor of literature, earning that way his daily bread.

His opinions are sentiments and his sentiments have compelled him to renounce many sources of revenue, as he reserves for himself the right to criticise and laugh a little at the events of to-day.

OLIVEIRA LIMA. — He belongs to the list of those who are at the same time writers and diplomats, and he knows how to take advantage of the spare time he can dispose of after his diplomatic duties devoting himself to historical, social and political investigations the publication of which has always been received by the Brazilians with applause. His works are most consciencious, reveal great patience, are not limited to literary or rhetorical prece-



OLIVEIRA LIMA

eupations, they are written in a grave style though fluent and clear, the style of a man who is used to deal with loyalty and impartiality. It is this way he writes history.

Manoel de Oliveira Lima, was born in Pernambueo. He entered the diplomatic eareer in 1890 having been appointed Second Secretary of the Brazilian Legation in Lisbon and later on he was transferred to the same position in Berlin. It was in 1892.

When promoted to First Secretary he was sent to Washington in 1896. From there he went to London 1899. After that he was charged with the affairs of the Legation in Japan.

He published in 1901, Reconhecimento do Imperio, e Memoria, sobre o descobrimento do Brazil; in 1894, the book « Pernambuco »— seu desenvolvimento historico; in 1896, Aspectos da litteratura colonial brazileira, and the pamphlet Sept ans de République au Brésil; and in 1899 a thick volume—In the United States— political and social impressions. He has written for the Jornal do Recife, Jornal do Commercio, of Rio de Janeiro, Revista de Portugal e Revista Brazileira, as well as in Jornal do Brazil and other papers. He is publishing O Secretario d'El-rey which it is said is an historical investigation work of no little importance, as well as it is a literary work of merit.

In 1903 he published a book on social observations and studies in Japan, with the title « No Japão » and written by him during his stay in that country.



Assis Brazil

Assis Brazil. — He is also a diplomat and a writer. He is an expert in everything he professes and cultivates. He is one of the best fencers in Brazil and is the best shot in the country. Nobody excels him as a marksman. At the same time he is also a diplomat of great ability and tact, as he proved to be in the recent Acre question between Bolivia and Brazil.

He has written on politics, law, poetry, as well as some works on industrial vulgarisation. Here is a list of his works: *Chispas* — a volume of verses of the youth, about 200 pages, Rio Grande do Sul, 1877;

O Opportunismo e a Revolução — public lecture delivered at the Club Republicano Academico, about 40 pages, São Paulo, 1880; A Republica Federal, 304 pages, Rio, 1881. Several reprints of this work were issued for free distribution, by some republican clubs. The first one was of 10.000 eopies, by order of the executive committee of the São Paulo republican party; History of the Rio-Grandense Republic, one volume (preparatory edition), Rio, 1882; A Unidade Nacional, about 50 pages, public lecture delivered in Porto Alegre on the evening of March 15th., 1883, Porto Alegre, 1883; Dois Discursos, delivered at the Rio Grande do Sul province Legislative Assembly, Porto Alegre, 1886, 153 pages; Assis Brazil aos Seus Concidadãos (to his fellow citizens) Porto Alegre, 1891 (a manifest about the political events that followed General Deodoro's coup d'état on the 4 th. November, 1891); Democracia Representativa, do voto e do modo de votar, Rio, 1893. This book was translated into the Spanish by Mr. Bartolomé Mitre e Vedia, Chief Editor of La Nacion, of Buenos Ayres, in 1904 under the title « La Democracia Representativa, del voto y del modo de votar. The edition has 339 pages; Do Governo Presidencial na Republica Brazileira, 370 pages, Lisbon, 1896; Cultura dos Campos, general notions of agriculture and special notion on some cultivations of pressing interest in Brazil, Lisbon, 1898. This work was printed on account of the Sociedade Brazileira para animação da agricultura, for free distribution in Brazil. This society is composed of Brazilians, the largest number residing outside of Brazil and its seat being in Paris. Assis Brazil has been its president ever since it was founded in 1895.

Among the proper jurists, we could eite many names of renown, because in Brazil the juridical-social sciences have many people devoted to their study and just now, some of the most vigorous talents, that have become ripe in the study of that speciality, form a numerous and elever group. But we will speak but of few. The most noted of them all by the variety of jurisprudence questions he has written about is Ruy Barbosa about whom we have already written. Ruy Barbosa has become better known as a philosopher, a writer, as a politician, it seems that the first place among specialistic jurists belongs to Conselheiro Lafayette Rodrigues Pereira, the author of a Direito das Coisas e Direitos do Familia (Things and Family Laws) two books that are two monuments of juridical science and scientific method upon special branches of private law and which might have been signed by any of the highest foreign authorities on the subject of the present day.

He was born in Minas Geraes, he began his political life, at the time of the Empire, defending the Republic, engaging himself most earnestly during years in its propaganda. With reflection and juridical culture deadening his republican enthusiasm, he accepted some offices from the monarchical government, having acted several times as minister, deputy and senator.

He has been charged with an international commission of great importance in Chili, and we believe he was Plenipotentiary Minister to the United States at the time of the proclamation of the Republic.

As a deputy, as a senator, as a minister he always discharged most brilliantly his duties, being a talented and competent man, as he proved to be. As president of the second Cabinet to which he belonged, being at the time the Minister of the Treasury, he wrote a report which was highly appreciated by the authorities in financial subjects.

While in the discharge of the duties of these high offices he revealed besides his juridical knowledge special competency in finances and literary studies.

We remember yet how fortunate he used to be in his ironical attacks against his adversaries during parliamentary debates.

CLOVIS BEVILAQUA. — It is the name of another jurist, who distinguished himself by many books he wrote on jurisprudence, literature, etc. Just because of his writing so many works, he was selected by the Government to write a Civil code for Brazil, task that he fulfilled most eleverly delivering it to the Brazilian Congress

that is discussing and improving the project of the code. He was born in Ceará and spent his youth among books and papers. He made his journalistic appearance in the State of Rio de Janeiro writing for several papers and establishing a newspaper « Aurora de Quissamã. He was a pupil of the celebrated Tobias Barreto, and he inherited from this giant some of his mental audacity, some of his



CLOVIS BEVILAQUA

emancipated spiritual nature, some of the solid criterion of that great Brazilian thinker.

Clovis Bevilaqua has published the following works: Philosophia Positiva, Recife, 1884; Traços do Desembargador Freitas, Recife, 1888; Lições de Legislação Comparada, Recife, 1893; Phrases e Phantasias, Recife, 1894; Epocas e Individualidades, Bahia, 1895; Direito das obrigações, Bahia, 1895: Direito da Familia, Recife, 1896; Juristas Philosophos, Recife, 1897; Esboços e Fragmentos, Bahia, 1896; Criminologiae Direito, Balia, 1896; Jesus e os Evangelhos

(translation), Recife, 1886; Hospitalidade no Passado, Recife, 1891; Estudos de Direito e Economia Politica, Recife, 1886.

Many jurists shine as stars of the brightest in the Brazilian social sciences sky. We would like to write here a few lines about every one of them, or at least about the leading ones, but our space is rather narrow. Andrade Figueira, Bulhões de Carvalho, Sá Vianna, Barradas, Sousa Ribeiro, Coelho Rodrigues, Duarte de Azevedo, Candido de Oliveira, João Monteiro are some of their names but there are many more. As we said, however, we will end here the jurists section and will take another direction.

* *

José-Carlos Rodrigues. — Dr. José-Carlos Rodrigues is the chief editor and publisher of « Jornal do Commercio », the leading Rio daily, the best known and most powerful paper in Brazil. He is a self made man, with broad ideas and a determined character. He

was born in Rio where he made his first studies. While quite young yet he went to New-York where with energetic work and enevelopedical knowledge he founded the « Novo Mundo » un illustrated Magazine printed in Portuguese devoted to commerce, literature and fine arts and he thus rendered good services to his country abroad. In 1890 he came back to Brazil and became the managingeditor of the « Jornal do Commercio ». With a live experience of affairs and commercial tact he gave a new impulse to that paper, opening a wider field of prosperity and giving it a moral prestige as



José-Carlos Rodrigues

to its opinions. He has published quite a number of studies on religious criticisms, finances and literature. Among the many great services that José-Carlos Rodrigues rendered his country is the deal of re-purchase of railways which netted several millions profit in benefit of the National Treasury. Dr. Carlos Rodrigues is a man of progressive ideas and being, as he is, at the head of a great newspaper, though somewhat conservative in its ideas, he has been a beneficial element in all generous and liberal movements. He is necessarily the president of all the civilising undertakings, and progressive initiatives wich have of late characterised the social and political life of his fatherland. Another trait of his moral profile is the generosity with which he contributes towards the support of charitable institutions. He is a writer of merit and a consciencious one, and is to-day one of the most popular and esteemed men in the higher circles of Brazilian society.

ALCINDO GUANABARA. — One of the most notable Brazilian writers, orator and journalist. He was born in Magé, State of Rio, in 1865. In 1885 he was already a well known man in the Rio press, editing then the « Gazeta da Tarde », where he worked for the freedom of the slaves. In 1887 he founded the « Novidades », which lasted but a few days. After that he was editor of « Correio do Povo », the only republican paper then in Rio, the « Jornal do Commercio », the « Republica », the « Tribuna » and to-day he is the editor of the « O Paiz ».

He has been a member of Congress and has represented the government in several commissions abroad. As an orator he is one of the most applauded ones. As a journalist, to-day, he is second to none, in the Brazilian press for the profuse variety of his knowledge, for his deep resources in polemies, for the brightness and vigor of his style concise and to the point, always at the side of liberal and patriotic ideals. He is the chief now in the campaigns in favor of the working classes, the tuberculosis as well as in the campaign against the parties enemies of public order. Alcindo Guanabara is the chief Editor of « O Paiz », the great organ of the conservative and intellectual classes of Brazil.



João Ribeiro

João Ribeiro. — He is a great thinker, a philologer, a historian, a literary critic, a poet and a journalist. His full name is João Baptista Ribeiro de Andrade de Fernandes. and was born in 1860 in the eity of Larangeiras, State of Sergipe. When he was 21 years old he went to Rio de Janeiro where he came immediately into prominence as a writer. He is one of propagators of German culture in Brazil

and a bachelor in social sciences. He represented Brazil in the Dresden Conference to discuss literary property in 1905 and in the following year in a Congress held in London for the organisation of the international catalogue. He is one of the 40 members of the Rio Li-

terary Academy and has published the following works: Tenebrosa Lux, poem, Aracaju, 1879; Dias de Sol, poetry, Rio, 1884; Philological studies, Rio, 1885 and 1902; Avena e Cythara, poetry, Rio, 1886; Morphologia e Collocação dos pronomes, Rio, 1886; Grammatica Portugueza, Rio 1888 and 1904 was in its 27th, edition. This grammar is for the 1st year study. For the 2nd year he has one in its 13th edition and for the 3rd in its 12th edition. Diccionario Grammatical, Rio, 1889 and 1904; A Instrucção Publica, Rio, 1890; Vesses, 2nd edition of works mentioned above, 1890, Rio; Historia Antiga, East and Greece, Rio, 1892; Auctores Contemporaneos, Rio, 1894 and 1895; Historia do Brazil, 1st and 2nd volume, 1900. Rio; O Coração, translation of the well known work of E. d'Amieis: Memoria dos successos occoridos no Gymnasio Nacional em 1903, Rio, 1904; Selecta Classica, Rio, 1905; Paginas Escolhidas (Academia Brazileira de Lettras) Rio, 1904, Paginas de Esthetica, Lisbon, 1905.

João Ribeiro has been editor of several papers both in Rio and São Paulo, such as « O Globo », « O Paiz », a « Revista Brazileira », etc.

ROCHA POMBO. - This Brazilian historian is one of the ablest literary men in the country. He was born in the small town of Monetes in the Paraná State in 1857. His first works were short stories, poetry, novels, published in the Paraná and Rio papers. He is living in Rio now. His best books are: Historia da America, Rio. 1890; O Paraná no Centenario, Rio, 1900; O Grande Problema, Rio, 1902; Resumo da Historia Americana, Rio, 1904; No Hospicio, novel, Rio, 1904;



Восна Ромво

Historia do Brazil, Rio, 2 volumes, 1905.

Rocha Pombo is considered the best historian of the modern ge-

neration and he is a journalist of no small merit. He writes for the « Correio da Manhã » a Rio daily of the opposition party.



VIRGILIO VARZEA

Virgilio Varzea. — 1s a writer. He was born in Canavieiras, Santa Catharina in 1864. He was brought up in G. Willington American School and afterwards in the Rio de Janeiro Navy College. He made several trips as mate in the Atlantic. Later on he was elected State Congressman and distriet-attorney in S. José, In his writings he became eelebrated for his inclination to select marine subjects, which helped him to become popular. He wrote the following works:

Traços Azues, poetry, Desterro, 1883; Tropos e Phantasias with Sousa Cruz, short stories, 1885; Mares e

Campos, short-stories, 1895; Rose-Castle, novel, 1893; Contos de Amor, 1901; Santa Catharina, historieal monography, 1900; A Noiva do Paladino, middle age novel, 1901; O Brigue Ftibusteiro, novel, 1903; Garibaldi in America, translation into Italian by Clemente Petti, 1904; Historias Rusticas, short stories, 1904.

Nestor Victor. — He is a hard worker and a clever literary man. He was born in Paraná. There he began to work as a journalist, poet, novel writer. Later on he began to write for the Rio press and afterwards in Paris. His works are quite original, beautiful phrases and lively ideas. As a novel writer Nestor Victor, is following with some success the psychological form of analysis and social criticisms, but he does not allow himself to be dragged by exaggerations of novels of given schools. He has written a good deal for newspapers, and writes well. He has succeeded to print in book form the

following works which have imposed themselves to the modern criticism: Signos, short stories, Amigos, novel of observation; A Hora literature and art criticisms, Rio 1900; Transfigurações, versos, 1904; Cruz e Souza, monography, Rio.

We will now speak of the literary writers, the poets, novel writers, critics, chronielers and journalists.

Among the untired and witty seouts of history, philosophy and social sciences as well as the literary men of the poetry. of the rhetoric, there are a host of names, representing the divulgers of knowledge, the journalists, the writers who brought popularity to the events of the day, the notions brought from Europe by every steamer. These writers whom we see at the head of the Rio papers as well as those of the different States are men of talent and vast knowledge,



NESTOR VICTOR

and are in the majority authors of books with poetry, short stories, literary critic, theatrical plays, speeches, etc. Without wishing to go very deeply into any subject, they perform a most important role, giving to the masses of the population the spiritual daily bread, that speculative high science, on one hand, and poetical inanity on the other, cannot give.

Araripe Junior, Barão de Loreto, Eunapio Deiró, J. Verissimo, are at the head of the list.

MEDEIROS E ALBUQUERQUE. — Strong, elever and emancipated mind, he is a true journalist of the age — an encyclopedia. — Like Beaumarchais he seems to like to boast himself of the fact that he was not born a nobleman, neither an abbot, a capitalist, nor any-

thing...... because he hates with an intellectual and compassive hatred, with equal dislike, the titles, the proud capital, the servilism. In a word, Medeiros e Albuquerque is a revolutionary soul



MEDEIROS E ALRUQUERQUE

checked by an analytical brain that finds pleasure in fighting formed opinions, be what they may, with science arms which he handles so cleverly. Though, young, Medeiros e Albuquerque is one of the strongest minds of Brazil. Through journalism he has paved his way in the road of life reaching the highest social and political positions without favors from any one. Unfortunately, polities, the eternal disturber, has overcharmed him, so that his wonderful assimilation and mental production capacities not finding the peace of the work desk. so favorable to the building up of great intellectual monuments, devote them-

selves to journalism, and thus Medeiros e Albuquerque writes daily about local questions and subjects needing discussion or editorial presentation.

Wrapped in this atmosphere he has not been able to publish but five or six books, dealing merely with literary subjects: poetry and short stories or novels, while it is well known his competency and authority to write on many subjects as philosophy, psychiatry, psychology, legal-medicine, history, pedagogy, religious criticisms, international law, private constitutional law, and criticisms on literature and art, and Lord knows what else. About all these subjects he has written time and again in his daily journalistic work that spread and lose so many teachings that could be so much more beneficial in book form.

His work in the daily papers and magazines has a personal stamp that distinguishes it from the other writers. As a rule he does not show any predilection for a theme, an objective subject, he writes on a variety of topics, scientific, social or those of mere entertainment for the reader, as it happens with an humoristic chronicle that he writes weekly for « A Noticia. » His style is clear, fluent, always respectful towards the grammar, but always joking about the grammarians. He has no pity for the impostor, never mind of what kind, but at the same time he is a friend of all those who are

good. In the literary critic that he writes in the « Noticia » he makes of it a kind of public audience receiving the actors whith hisses or applauses according to their merit. He hates conventionalism so much that he doesn't admit it even in oratory. It is curious to see him in Congress. Each one of his speeches, never mind how animated the debates may be, is simply a talk with his hearers: he substitutes natural eloquence for the rhetoric, the brilliance of speech for the novelty in ideas, in which, either writing or speaking he is perfectly original.

At present, of all the editors writing steadily for Rio papers, none has won credit for a stronger and richer intellectual capacity than Medeiros e Albuquerque. He was born in Recife, began his career as a teacher of primary studies, in Rio, where he is to-day General-Director of Public Instruction, Federal Congressman, professor of the Fine Arts College, etc. He published: O Remorso, 1888, a pamphlet on republicanism, the sale of which was persecuted by the police; Canções da Decadencia, verses, Rio, 1891: Peccados, verses, 1894; A Practical Man, novels and short stories, 1896; Mãe Tapuia, stories; Os Protocollos Italianos, patriotic pamphlet, 1897. Besides these he has executed considerable newspaper work and has edited several papers: «O Tempo», «O Figaro» and others. Today he writes for Rio, São Paulo and Pará papers.

A curious note: Brazil being the country of the poets, he is the only one whose name is in the legislature of the country as he wrote the " $Hyuno\ da\ Republica$ ", which was decreed by the law under N° 171 of 20 th. January, 1870.

Affonso Celso. — He is an untired literature worker and is still quite a young man, being a monarchist he has been set aside by politics and thus is that he is entirely devoted to his studies now. He can present a larger production than the majority of Brazilian literary men of to-day. He was entirely devoted to his studies when the liberal party of the Empire involved him in politics. With the republican form of Government he returned to his studies. It seems that



AFFONSO CELSO

every evil is a beginning of some good. We must explain our expression that he was set aside by politics. It was his noble scruple that made him abandon politics, fighting, encouraged by the impulses of filial devotion, the Republican Government that ordered his father's exile when he was the president of the Cabinet of the Imperial Government at the time of the proclamation of the republic.

But, speaking of Affonso Celso, we must say that nearly every year he publishes a book, and as a rule, a good book: Some of these are a true success, as the one he wrote with the title: « Porque me ufano do men Paiz. » (The reasons why I am proud of my fatherland.) He also published: Vultos e Factos; Minha Filha; O Imperador no Exilio; Lupe; Notas e Ficções; Rimas de Ontr'ora, (verses); Um invejado; Guerrilhas; Contradictas Monarchicas; Giovanina; O Assassinato de Gentil de Castro, a pamphlet on politics; A Imilação de Christo (Poetical translation of the famous book); Oito annos de parlamento, (historical and political memoirs). He has also written considerably in the newspapers both in Brazil and abroad. He is an excellent orator, earnest and deep, a man of advanced ideas and fighting convictions. He evidenced most firmly these qualities while in the Parliament fighting whith all the earnestness of his great soul for the freedom of the slaves.



PIRES DE ALMEIDA

Pires de Almeida (José Ricardo). — He is the type of those writers who are always at their desks, in their studios, nobody knows him personally, and notwithstanding he his always before the public by means of his constant work, deep and varied work.

He is a polygraph. He has rendered services with his brilliant work to the medical sciences, the stage, the poetry, the statistics, of which he is a great worker, the philology, the history, questions of public instruction and tutti quanti. He shuts himself up in his library, in the morning, at night, and periodically but with the silent regularity of a sand-clock, he appears in

the columns of the « Jornal do Commercio » where he has been a writer for the last thirty years, elucidating the most varied subjects, with a number of informations and knowledge which denote his untired and investigating patience. Every now and then he presents at intervals between those journalistic works, almost mechanic by their persistence, some thick book of historical investigation and analysis, pedagogy, theatre and other subjects.

Typically modest, backwards, or indifferent he produces, builds his extensive intellectual work, without even feeling or realizing that he is doing it. He does not frequent the centres of bohemia in Ouvidor Street, neither any of the mutual praise group. He has not deserved from the critics but a polite tolerance and some flying praises.

Pires de Almeida was born in Rio de Janeiro. He is a graduated from both the Medical and Law Colleges. From his many works we now remember: Historia do Drama; L'Instruction Publique au Brésit; O Theatro no Brazil; Tiradentes; A Educação; A Festa dos Craneos; Liberdade, O Mulato; Sete de Setembro; O Trafico; Martyres da Liberdade; Tempestades do Coração; Phrynéa e Paschoa (dramas); Retrotos á penna; Centenario do Sr. Sempreviva, Baptisado na cidade nova.

Coelho Netto. — He was born in the State of Maranhão, (in the city of Caxias in 1864). Maranhão is well known as a State who has furnished a large and great contingent of literary talent, it is as they say — the eagles' nest.

Coelho Netto came to the South and began his work writing for newspapers and afterwards some books. He is a quick worker and no writer has in the same space of



COELHO NETTO

time sent more books to the printing press than he has. Each one of his works would suffice to establish the reputation of an author. He has books of all kinds: novels describing habits and customs, naturalistic novels, romances of all kinds, extravagant ones, historical, psychological and so on. He has written comedies, tragedies, poetry, words for the music of operas, criticisms, history, entertain-

ing chronicles, has written on oratory, on education, on art criticisms, etc.

He went to São Paulo in 1883, after having published in the « Gazetinha » his first literary essays. He wrote in São Paulo for several Academic publications. From there he went to Recife, capital of Pernambuco State, where he frequented the first year of the Academy, came back to São Paulo and devoted himself body and soul to literature. He published a paper with the title of « Meridiano » which lived the life of a rose. Having taken part in the campaign in favor of the freedom of the slaves he was persecuted and had to run away to Recife in 1885 where he passed his examinations of the 3rd year Law College course. It was his lot that he would never become a lawyer or a judge. He came to Rio de Janeiro and was invited by José do Patrocinio to work in the « Gazeta da Tarde » and there he worked most actively. Later on he left this paper to establish one of his own « O Dia », that lasted but a short while, and then he was invited to manage as editor the « Diario Illustrado ». In this paper he started the publication of his novel « A Bohemia » written day by day, « O Diario Illustrado » had no resources, and though its editor was working with earnestness he did not succeed in overcoming the great difficulty of public indifference. He was then invited by the « Cidade do Rio », in the eve of the freedom of slavery. In that paper he published A tapéra, a great number of short stories, and began to write O Rei-Fantasma. In the « Diario de Noticias » he edited a section A Fumar (smoking) and wrote Sunday stories. In 1890 he married with Miss Maria Gabriella Cœlho Mello. For a while he abandoned newspaper work, and was appointed Secretary of the Government of the Rio State, during the administration of Dr. Francisco Portella. On November 23rd he went back to newspaper work, with O Paiz and in that paper he developed his activity writing a daily chronicle, Bilhetes Postnes (Postaleards), Sunday stories, and other articles. In that paper he published also writing them day by day the following romances: A Capital Federal; Miragem; Inverno em flor and Rei Fantasma. From that paper he went to the Gazeta de Noticias where he had a daily section under the title of Fagulhas besides articles on all topics and short stories with the titles of Georgicas, exotic stories of the Album de Caliban, and the romances: O Paraiso; O Morto; O Rajah do Pendjab and the novels Cega; Os Velhos; of the volume published later on with the title of Sertão. In another paper, the Republica he published, A Conquista, and in the Revista Brazileira he began O Agareno (Tormenta). He wrote the Pelo Amor! dramatic poem

and Saldunes both with music by Leopoldo Miguez; Artemis, in one act, music by A. Nepomuceno, and Hostia, also in one act, music by Delgado de Carvalho. All these works were put on the stage by the Centro Artistico, of which Coelho Netto was one of the founders. For the stage he wrote: Neve ao Sol, (Snow in the Sun) play in four aets; Ironia and Ao luar, one aet plays; As estações, lyric episodes, in one act and in verse; and the comedies: O Diabo cm Casa, O Relicario, in three acts, and Os Raios X and Fim de Raca, in one act. With Olavo Bilac he wrote several school readers, Terra Fluminense; Contos Patrios; Patria Brazileira and these books are adopted in the public schools. Coelho Netto wrote also a book Viagem de uma familia ao Norte do Brazil. He writes for « Correio da Manhã », Rio daily, O Estado de S. Paulo, A Revista Medica de S. Paulo, and Jornal de Nolicias of Bahia. He is at present professor of literature of the National Gymnasium of Campinas. He is a member of the Academy of Letters (A literary institution admitting only 40 members representing the cream of Brazilian literary men. Besides the books we wrote of above he has yet: Rapsodias; Bulladilhas; Fructo Prohibido; America; Inverno em flor; O Morto; A descoberta da India; Romanceiro; Lanterna Magica; Seara de Ruth; A conquista; Por Montes e Valles. Edited by Domingos de Magalhães, he published Memoria on art, in the 2 nd volume of the Livro do Centenario, Viagem de uma familia ao Norte do Brazil; Fim de seculo; a bico de penna; (Agua de Juventa; Ruinas; Bom Jesus da Matta). Edited by Delloz brothers, of Oporto, Portugal, he has Apologos, tales for children. He edited with Paula Ney and Pardal Mallet a pamphlet « O Meio ». He wrote for « A Vida Moderna » and « A Bruxa » literary magazines. He was professor of Art History in the Fine Arts college for one year and editor of the debates in the Federal Senate.

He is a literary Proteus. His style is powerful and brilliant, by the sweetness of its form, as well as for the opulence of its vocabulary. In this particular excepting Ruy Barbosa, no other literary man exceeds or even equals him.

He is a true nabob of the vocabulary.

Coelho Netto has written on every subject, of re omne scibile, but the most solid base of his literary glory is the romance.

Once we spoke about romancists we will mention some other names, but only the most popular ones, as the space is rather limited to write about the whole family of those cultivating novel writing literature.



ALUIZIO AZEVEDO

We will mention before any other Aluizio Azevedo, who like Coelho Netto was also born in Maranhão.

He differs entirely from Coelho Netto because he devotes himself to one single kind of fiction: The natural romance. He has given his work a stamp of perfection which gives him the right to a place of honor among the other writers. His style is concise, neat and bright. He gives the proper name to everything, without looking for euphemisms, as others usually do. He is most minucious in details, and in his descriptions

we have first the notion of the details of the accessories and afterwards the altogether. The great merit of his work lies mainly in this analytical predisposition, which enables him to that descriptive fidelity and precision so convenient in a romance that needs observation. He knows how to select his types in the local atmosphere and in preference in those classes less cosmopolitan.

He has also written for the stage, though with not so much success as when writing novels. Here is a list, though incomplete, of his works: — Uma lagrima de mulher, Maranhão, 1879; O mulato, 1880 (several editions); Memorias de um condemnado, Rio, 1881; Mysterio da Tijuca, Rio, 1882; Casa de Pensão, Rio, 1883; Philomena Borges, Rio, 1883; O Cornja, Rio, 1885; O homem, Rio, 1887; O Cortiço, Rio, 1890; O Mulato (drama), 1884; Casa de Orates (comedy with Arthur de Azevedo), Rio, 1882; Flor de Liz (operete, collaboration), 1882; Philomena Borges (comedy in one act), Rio, 1884; Venenos que Curam (comedy), Rio, 1885; O Caboclo (drama), 1886; Os Sonhadores (comedy in three acts), 1887; Fritzmak (comical review, collaboration), Rio, 1887; Fóra de horas (short stories); Livro de uma sogra, Rio, 1887; Demonios, Rio.

XAVIER MARQUES. — He is another novel writer with a firm reputation. It is a mind quite different from Aluizio Azevedo, he is not inferior to him, in some points is even his superior. He started in Brazil a reaction against Zola's school, basing the observation

novel on local forms, in which provincialism, the peculiarities of his community are introduced in the novel. Studying, under a feature in which psychology and idealism do not repel each other, men and the people's habits and customs, he succeeded in creating national types, national scenery, a national work, in short, in his elaborated romances, written in a sound language, very rich and noted above all, by the propriety of its application, by the full measure of its

vocabulary. His style, not having the unevenness of Coelho Netto's, is as bright and charming as his. His books denounce a careful attention in its writing and we do not notice a simple mistake not even a lapse, or an unapropriated term; much to the contrary he is fluent, expontaneous in his narratives and in the exposition of his novel.

As we say, Xavier Marques, is a contrast of Aluizio Azevedo, both in his physical as literary personalities. He never wished another scenery for his heroes but the normal moral atmosphere. Vice, blood, aberrations find no room in his books, and he does not



XAVIER MARQUES

devote himself either to the idealistic kind and the honneteté of G. Olmet's novels. He limits himself to fix simply the truth, which, in this, as in everything else, is always in a just term. He was born at Itapariea island, Bahia, and had no great trouble to isolate himself in literature as he isolated himself socially, as he isolated himself geographically is his province, and he never wanted to deviate himself from this programme. Xavier Marques each day has more readers and each day is read with more interest. The editions of his books sell out and this proves that the public is not such a bad critic as it seems. Some of his books are destined to gain a reputation even abroad as that delicate idyl Joanna e Joel. He started his intellectual life as editor of the « Jornal de Noticias », in Bahia, and worked afterwards with Diario da Bahia, Diario de Noticias and A Bahia. He wrote: Themas e Variações (verses), 1884; Simples Historias (short stories), 1886; Uma familia Bahiana (romance), 1888; Boto & Co, romance on habits and customs, 1897; Joanna e Joel, Bahia, 1899; Holocausto (romance), Bahia; Pindorama, historical romance which won the prize of the Historical Institute of Bahia, in 1900; O Sargento Pedro (episodes of the war of independence);

O arpoador and Maria Rosa. These two last books belong to a collection under the name of « Praicira » to which also belongs Joanna e Joel, a series of stories of maritime and sea-shore life a poetical world picturesque and novel shown to us by X. Marques in Joanna e Joel.



JULIA LOPES DE ALMEIDA

Julia Lopes de Almeida — occupies one of the first places among Brazilian romance writers, proving the truth of what Staël said to Napoleon: genius has no sex. In fact Julia Lopes de Almeida because of her inventive capacity, her talent to tell, her beautiful language rich in colors and attractiveness, is one of the greatest names among those who are clevating the fiction literature in Brazil.

She is a daughter of Visconde and Viscondessa of S. Valentim and was born in Rio in 1862 and here she started her studies.

When she was but 19 years old she was the chief editor of the « Gazeta de Campinas » and was writing for other papers. She then

made a trip to Europe and married Filinto de Almeida, a journalist and literary man of repute.

Writing constantly and frequently to the papers and magazines, she saw her name respected and applauded as an intellectual notability and she was at the same time appreciated for her virtues as a noble mistress of her charming home.

While she was yet a little girl her golden dream was the stage, but family and books took that away from her head. Her books have, to be sure, obtained for her better applauses and a better name and reputation than the stage, it may be less noisy, but is also less ephemeral.

Not long ago, a foreign writer of her sex, wrote in « La Mujer », an Argentine magazine, « Julia Lopes de Almeida has an equally delicate mind and intelligence. She is kind, sweet, as the fruit of her native country, to which she has robbed the juice and sugar taste, that emanate at one time from her phrases and her eyes.

At the same time that she feels that she is in love with literature, and writing, enjoys, as she herself says — and that compared with me makes a sensible contrast, just as with our physical person, in which we are a live contrast — she takes care of her children with endless love, and surely from them she receives her best conceptions. »

She has published: — Traços e Illuminuras (tales); A familia Medeiros (romanee); A Vinva Simões (romanee); O Livro das Noivas; A Fallencia (romanee); two editions; Ancia eterna (short stories); Memorias de Martha, (novel); Historia da nossa terra; Contos Infantis. This last one she wrote it with her sister Adelina Vieira also a writer, both in prose and verse, much appreciated in Brazil.

We do not wish to eite all the romanee writers of Brazil, neither would there be room for all of them if we were to write the remarks to which they would have a right. We must, however mention, Nestor Victor, a strong talent as a poet and novel writer, who has been writing considerably in the newspapers. He has published with great suecess: Signos (a beautiful book of short stories), Rio 1897; Cruz e Souza, (study on the poet Cruze Souza); Amigos, Romance, Rio, 1900; A Hora, (criticisms), Rio, 1901.

Other names worthy of mention in this branch are: Rodrigo Octavio, the bright author of the *Cabanos*, and other books; Inglez de Sonza; Affonso Arinos; Graça Aranha; Garcia Redondo; Enelydes Cunha; Leopoldo Freitas; Viveiros de Castro; Lucio de Mendonça and many others.

It is about time to write something about the stage, about the play witers. This kind of literature has at present but few men who devote themselves to it seriously. Of those few some have their reputation established but others are just learning how to fly. Of the former the first one Arthur Azevedo, a native of Maranhão, who came while quite young to establish his residence in Rio de Janeiro. He first started his career as a journalist. He is one of the most talented men of the present age and there is hardly any branch of literature that he has not devoted himself to with brilliancy meeting always with success. But his strong-hold is the stage and to that he devotes himself body and soul.

He has written a large number of plays both in prose and verse, humoristic chronicles, poetry, art criticisms, etc. He is a superior mind not accessible to the small egotistical passions. He is a loyal



ARTHUR AZEVEDO

friend and a kind man, so kind that he would lift from the ground his enemy should he fall.

His first theatrical essay was when he had 15 years of age. It was a comedy. The success of the play was such that he became immediately a popular man, and his comedy has been produced ever since by every theatrical manager in Brazil. Its name is Amor por Anexins (Love by quibbles).

No writer in Sonth America has seen his name oftener in the posters and in the newspapers.

He is also an inspired poet and dramatic critic of high compentency.

Here is a list of his principal works, only the principal ones: — Comedies: — A joia; Liberato; Casa de Orales; Badejo; Fantasma na Aldeia; Industria e celibato; Fernando o engeitado, Reviews: — O Mandarim; Bilontra; Mercurio; Viagem ao Parnaso, Plays on habits and enstoms: — Vespera de Reis; Os noivos. Comie Opera: — Donzella Theodora; Princeza dos Cajueiros. Parodies: — Maria Angu; Mascotte na Roça; Abel Helana; Casadinho de fresco; Amor ao pello; Dramas: — O Anio do mal; Duas irmãs, Magie plays: — A Filha do Fogo and several others. Monologues: — Hellar e Fagundes; O Alfacinha. Translations and adaptation: — Niniche; Gilette de Narbone; Flor de Liz; Falca; Genro e Sogro; Tres boticarios; Coquelicot; Dia e noile; Filho de Coralia; Mascara de Bronze; Mulheres do Mercado; Perola Negra; Proezas de Richelieu; Novels and short stories: — Contos ephemeros; Contos possiveis; etc., etc.

Now we will speak of the Brazilian poets, they are numberless and an uneven lot.

They comprise every one in the country. One of them asked once: Who is there that does not write verses when 20 years old? And he was about right. Nearly every man is a poet in this fatherland of the orators and poets, and nearly every writer has started his eareer writing a book of poetry.

Some of the poets, however, have elevated themselves far above the multitude of verse makers, and among those there are some great individualities who are real poets and from those superior personalities the critics give the first places to:

Olavo Bilac. — Was born in Rio de Janeiro where he lives still to-day, devoting most of his time to journalism. He devotes himself entirely to literature and lives from it. He is a young, flexible, expontaneous, delicate and genteel writer. He is a magnificent and charming speaker, he dominates the word spoken with great ability and in the delivery of his speeches one will notice the same fluent and expontaneous facility that he shows in his verses so sweet and so natural. His name is disputed by newspapers and magazine editors as a good advertisement for those who are lucky enough to secure his collaboration. He is one of the Editors of the « Gazeta de Noticias » and



OLAVO BILAC

through its columns he fights daily with enthusiasm for all the good causes that may help the progress of Brazil.

His chronicles run away systematically from grave subjects but selects any light theme more artistic in its slyle and at the same time more natural. This does not mean that in any way he avoids a subject never mind how grave if he deems it necessary to present his criticism that a moral lesson or a warning might be deducted from it, but never mind how circumspect the subject may be he will treat in such a light form so that he may use that soft but convincing style that he so cleverly masters.

He has published stories, verses, and text books. We are now going to give our readers one of his beautiful poems and we are sorry that pressing time to prepare this translation does not permit but to give here a rough translation of it:

MALDITA SEJAS...

Se por vinle aunos, nesta furna escura Deixei dormir a minha maldição, — Hoje, velha e caaçada da amargura, Minh'alma se abrirá como um vulcão: E, em torrenles de colera e loucura, Sobre a tua eabeça ferverão Vinte annos de agonia e de tortura, Vinte annos de sileneio e solidão!

Muldita sejas pelo Ideal perdido! Pelo mal que fizeste sem querer! Pelo amor que morreu sem ter nascido!

Pelas horas vividas sem prazer! Pela tristeza do que tenho sido! Pelo fulgor do que deixei de ser!

(Cursed Mayest Thou Be.... — If during twenty years, I allowed my curse to sleep in this dark den, — to-day, old and tired of that bitterness, my soul, like a vulcan, will burst open: And then, twenty years of agony and torture, twenty years of silence and solitude, over thy head will pour boiling in a stream of passion and madness! Cursed mayest thou be for the lost Ideal! For the evil thou hast done unwillingly! For the love that died without ever having been born! For the lively hours spent without any pleasure! For the sadness of what I have been! For the splendour of that I could not be!)

MAGALHÃES DE AZEREDO. — A bright and a young poet is Magalhães de Azeredo. He was born in Rio, in January, 1872. He was brought up in Europe but finished his studies in Brazil. While yet a student in the São Paulo Law College was already the editor of the Eslado de São Paulo. Later on in Rio he worked with the « Gazeta



Magalhães de Azeredo

de Noticias ». In 1894 he was appointed Secretary of the Brazilian Legation in Montevideo and from there he was transferred in 1896 for the same position in Rome. In January 1897 the Academia Brazileira elected him to be one of his 40 members to which number the membership is limited, just like in the French Academy. The books he has published are: Alma Primitiva (story); Procellarias (verses); Balladas e Phantasias (verses); José de Alencar (study); O Portugal no Centenario das Indias. He has written very much in newspapers and magazines, mainly in Jornal do Commercio; Revista Brazileira; Revista Moderna, of Paris; etc. He is about to publish; — Homens e Livros; Poesias;

Aspectos da Italia; Melancholias (story); O Santo (romanee); Rusti-

cas e Marinhas (verses); Elogio historico de D. J. Gonçalves de Magalhães.

Here we give now a sample of his verses:

A UM POETA

Que o teu amor de Ideal no empeuho não consista
De cultivar em ti sômente o puro artista.
E o llomen? Nuta oale; e direitos não tem?
A oerdade eonduz ao Bello e o Bello ao Bem.
Segue essa lei : quai joia esplendida, lapida
Tua alma; e nisso põe tal zêlo e tanto ardor.
Que entre as obras do teu espirito creador,
A mais perfeita seja a tua propria vida.

(To a poet. — May thy love for the ideal not consist in the earnestness to make of you only a simple artist. And the man? Is he worth nothing? Truth leads to the Beautiful and the Beautiful leads to the Good. Follow that law: lapidate thy soul just as if it were a splendid jewel; and do it with such zeal and such eagerness that, among the works of thy creative mind, the most perfect may be your own life).

Augusto de Lima. — Is one of the most noted poets of today, but he is so modest and backwards that few know him personally. In our travels through the States I had the pleasure of meeting him in Bello Horizonte. He was introduced to me as a noble and fair spirit. We became good friends and to be sure I am not the least enthusiasmed of his admirers. Augusto de Lima was born in Minas Geraes, where he is to-day the Director of the Public Archives. He is a



AUGUSTO DE LIMA

member of the Rio Academy of Letters, but this will not give him a better reputation than his verses will. He photographs himself in his works. He is a learned and philosophical poet, a little skeptical and a little melancholic. He has published but few books. They are: Contemporaneas (verses), 1887; Symbolos (verses), 1892 and A Vida (poem) and several pamphlets, speeches and Brazilian History. The first work of Augusto Lima, Contemporaneas was published in

Rio and in it he revealed himself a true poet not only because of the form as by the vigour of the thought, novelty of ideas, and strong beauty of the eonception. He does not sing like the spring poets foolish love affairs and fancy flirtations. His themes are human and social and is just that that shows him quite different from the majority of the Brazilian poets. In his book the *Contemporaneas* and for that matter the *Symbolos* each piece of poetry is a gem, not one single inferior production can be found among them.

Here we give a sonnet from his book Symbolos, as a sample:

RISO E PRANTO

Duns fracções o grande todo humano encerra: uma que ri, outra que chora. Duplice monstro, contrastado Jano; tem numa face — a noite, e noutra — a aurora

Mas em seu seio eternamente mora, como o polypo no profundo oceano, a dor que o riso mentiroso enflora, a mesma dor que verte o pranto insano.

Basta que riso ou lagrima recume da contracção de um musculo irritado, temos amor, pezar, odio ou ciume.

Nem sempre o riso é uma expressão de agrado, e ás vezes quem mais chora se presume feliz, por parecer mais desgraçado.

(Smiles and Tears — The great human whole encloses two fractions : one that laughs, another that weeps. Double monster, like Janus, wears on one cheek — night, and on the other — dawn. But in its bosom, there lives for ever, just like the polypus in the deep ocean, the pain that the lying smile embellishes, the same pain shed by the maddening tears. It suffices that a smile or tear shall ooze from the contraction of an irritated muscle for us to feel love, regret, hatred or jealousy. It isn't always that the smile pleasantness expresses, and sometimes those who most weep happier seem to feel, for the thought of looking to others more unfortunate...)

Fontoura Xavier. — He is a poet and a writer of reputation. He is to-day Consul General of Brazil in New York city. He was born in Rio Grande do Sul. He writes well several languages and had the pleasure of seeing his best pieces of poetry, translated, by poets of renown like Bliss Carman, W. Watson, and others, into other languages. He has published several works the most celebrated of which is the « Opalas », Porto Alegre, 1884. He also published the Agnia Americana, (the American Eagle); the Venus de Washington;

Estrophes a Baby Mee; O Pagem; As Montanhas; As Cataratas do Niagara, Spleen de Baudelaire; and El Dorado de Poe;



FONTOURA XAVIER

As a sample of his high degree of fine humor we publish here one of his sonnets with its translation in prose.

A MULHER DO PALHAÇO

Eu ando triste, mudo, ntrabiliario,
Perseguc-me a visão de um souho vago;
Tenho as tristezas tetricas de Mario,
E as solidões sinistras de Carthago.
Nem saiba o mundo... Tábido sudario
Envolva-me a paixão que em mente afago...
Vou em meio caminho do Calvario
E desconheço a cruz que aos hombros trago!
Desconfio de alguem. De longa data
Conto entre as minhas relações ignotas
A graça esculptural duma acrobala...
Muita vez, á saida, dei-the o braco,
E inda tenho presente as cambalhotas
Que ella dava na ausencia do palhaço!...

(The Clown 's wife. — 1 am sad, dumb, melancholic, persecuted by the vision of a vague dream, I have the bitter sadness of Mario and the sinister solitude of Carthago. I don't want the world to know... Let an hectic shroud wrap up the burning love I caress in my mind... I am half way to the calvary. And ignore the cross that my soulders bears! — I suspect some one. For a long time I have had among my unknown acquaintances, The sculptural grace of an acrobatic woman... — Often, going out, she left arm in arm with me, And I can still remember the tumblings she gave when the clown was away!...)



MUCIO TEIXEIRA

Mucio Teixeira. — He is one of the Brazilian writers who has worked the most. He was born in Porto Alegre, 1858. When he was but 21 years old he was Secretary of the Espirito Santo province, Afterwards he went to Venezuela as Consul General. He was editor of several papers in Bahia, São Paulo, Rio Grande, and Rio de Janeiro. Living as he does by his pen he has quite a number of productions many of which have been translated into other languages:

Poetry: Vozes Tremulas, 1 vol.; Violetas, 1

vol.; Ondas e Nuvens, 1 vol.; Sombras e Clarões, 1 vol.; Novos ideaes, 1 vol.; Prismas e Vibrações, 1 vol.; Hugonianas, 1 vol.; Poesias e Poemas, 1 vol.; Celajes (in spanish) 1 vol.; Brasilenas y Luzitanas, 1 vol.; Poesias de Mucio Teixeira, 2 vols.; Campo Santo with 72 illustrations.

Poems: Cerebro e Coração, 1 vol.; Fauslo e Margarida, 1 vol.; Contos em Cantos, 1 vol.; Um sonhador do Seculo, 1 vol.; O Inferno Polilica, 1 vol.; O Tribuno Rei, 1 vol.; O Girafa, 1 vol.; Os minuanos, 1 vol.; O Inconfidentes, 1 vol.; O Mestre de Santiago, 1 vol.; Pequenos poemas de Campoamor, 2 vols.; O Drama Universal, 2 vols.; Mulheres do Evangelho, 1 vol.; Vera Cruz, being finished.

Dramas: O Fitho do Banqueiro, 5 acts; Alváro o Fanapo, in

5 acts; A Flor de um dia, 4 acts, verses; Tempestades moraes, 3 acts; A virtude no crime, 5 acts; O Sobrinho pelo Tio, 3 acts; Montalvo, 3 acts; Chimica Conjugal, 1 act, verse; Caridade, 3 acts;

Works in prose: Memorias dignas de memoria, 5 vols.; Synthese historica da Literatura Brazileira, 3 vols.; Poetas de Venezuela, 1 vol.; Poetas do Mexico, 1 vol.; Poetas da Bolivia, 1 vol.; Poetas da America Latina, 1 vol.; Poetas do Brazil, 3 vols.; Vida e Obras de Castro Alves, 1 vol.; a Revolução do Rio Grande do Sul em 1893, 1 vol.; La administracción del Doctor Juan Pablo Rojas Paul en Venezuela, 1 vol.; Un año en Venezuela, 1 vol.; O Brazil Marcial, synthese historica das guerras, revoluções e revoltas, desde os tempos coloniaes até á actualidade, com biographia e os retractos dos heroes. (Historical resumum of wars and revolutions from Colonial times up to now, with biographies and pictures of the heroes, and others.

LUCIO DE MENDONCA. -He is a judge and a poet. He was born in 1851, in the city of Rio. He studied in the S. Paulo Law college. After his graduation he devoted himself to journalism. He was also a poet, like all the students of his time were. He revealed great talents in his writings and soon made a name for himself in São Paulo which might have been of far more advantage for him if he had



LUCIO DE MENDONÇA

been writing in Rio. To-day Lucio de Mendonça is a member of the Federal supreme court and one of the 40 members of the Literary Academy.

His books are «Nevoas Matutinas», poetry; « Canções do Outomno», poetry; « Esboços e Perfis», short stories 1889; « Vergastas»; « Horas de Bom tempo», Rio 1903.

Lucio de Mendonça worked as a journalist in S. Paulo, Minas and Rio, writing for « Provincia de S. Paulo », « Gazeta de Noticias », « Estação », « Semana », and others.

Luiz Guimarães (Filho). He was born in Rio in 1877. He went to Europe with his father who was a diplomatist. He graduated in 1897 from the Coimbra University, in Portugal. Returning to Rio was given the position of Editor of the « Gazeta de Noticias »a Rio daily. He wrote for nearly every one of the Rio dailies. He published seven volumes of poetry: Idylhos Chinezes, Ave Maria, Uma Pagina do Quo Vadis, and Pedras Preciosas. These are the four best ones. The edition of his books are as a rule sold ont.



Luiz Guimarães (Filho).

Luiz Guimarães (Filho) is a diplomatist. He was the secretary of the Brazilian Commission to the 2nd Pan-American Congress, Secretary of the Brazilian Legation in Montevideo and to-day he holds the same place in Tokio. His verses have been translated into Spanish, French and Swedish.

Luiz Edmundo. — He is a most clever writer and a poet of no little merit. He was born in Rio on the 26th June 1879.

In 1898 he published his first book « Nimbos ». Since then he

published another one « Thurybulos », in 1899; and « Turris Eburnea » in 1902.

In 1899 he founded a magazine « Revista Contemporanea » of which he is the chief editor.

This magazine has in its staff of writers the best writers of this generation: A. de Guimarães, B. Lopes, Luiz Guimarães Filho, Mangabeira, Nestor Victor, Carvalho Aranha, Luiz Pistarini, Paulo Barreto Azevedo Cruz and others. It is published in Rio de Janeiro and has attained success as an artistic and literary magazine.

Luiz Edmundo is preparing now another book. This as all the others he has written are poetry. He is writing, however, his first essay in prose « Impressions of a trip to Central Europe. »



Luiz Edmundo

He has written for every daily and every magazine that has been published in Rio since 1897.



RAYMUNDO CORREA

RAYMUNDO CORREA. — We do not intend to fill these pages with the names of that large host of Brazilian poets, as we wrote before. Their number is too large and should they devote the time spent in verses making to more useful exercises in agricultural, industrial or business pursuits much better it would be both for themselves and the community. But since we have mentioned a few of the cream, we can't leave outside the name of that most inspired poet Raymundo Corrêa. He is a true poet. He was born in Minas, and is at present

judge in one of the Rio de Janeiro courts.

He can't be imitated in the perfection of the conception, the inventive genius and the melody of his verses. It is enough to read the sonnet below, a sonnet known by heart by every Brazilian from one end to the other of the country and in it you will see the great soul of the poet:

AS POMBAS

Vae-se a primeira pomba despertada... Vae-se outra mais... mais outra... emfim dezenas De pombas vão-se dos pombaes, apenas Raia, sanguinea e fresca, a madrugada.

El à tarde, quando a rigida nortada Sopra, aos pombaes de novo ellas serenas, Ruflando as azas, sacudiado as pennas Voltam todas em bando e em revoada.

Tambem dos corações, onde aboloam, Os sonhos, um por um, céleres voam, Como voam as pombas dos pombaes.

No azul da adolescencia us azas soltam, Fogem... mas aos pombaes as pombas voltam, E elles aos corações não voltam mais ..

(« The Doves ». — There goes the first dove that awoke... there goes another one... still another... well, dozens of doves fly from the dove-houses, when dawn, reddish and fresh, hardly begins to appear. — And at the sun-set, when the Northern strong winds blow, there they come again flying back in bands to the dove-houses, so serene and cheerful moving their wings, shaking their feathers. — Thus also, from the hearts, where the dreams are fastened, one by one, they swiftly fly, just as the doves do, from the dove-houses. — In the blue of the adolescency they spread their wings, they fly... but the doves return to the dove-houses, and the dreams never come back to the hearts.)

We could yet mention other names of poets who have won a just notoriety as Luiz Murat, Luiz Delphino; Lucio de Mendonça, Alberto de Oliveira, Mucio Teixeira, João Ribeiro, — who is also a writer of no small reputation, but we have no space.

We need now to review another feature of Brazilian talent. They are the artists of to-day.

MUSICIANS, PAINTERS AND SCULPTORS.

This feature of Brazilian artistic life is not less brilliant than the ones presented in previous sections. Were it not that our programme binds us to write only of the men of to-day we would have much to write about great men, among whom is one who won fame abroad as well as in the country. He is Carlos Gomes, the immortal author of « Gnarany », opera that has been and will continue to be sung all over the civilized world. And he is not the only one of our dead notabilities. We had Miguez, the author of the « Saldanes » José Mauricio, the great composer and others.

But we will write only of the men of to-day, the space being limited,

Alberto Nepomuceno. — We owe the first place to the author of « Artemis ». He is the only maestro now in South-America who deserves to inherit the glory of Carlos Gomes.

He was born in Fortaleza, Capital of Ceará, on the 6th July, 1864 and is a son of the great musician Victor Nepomuceno, well known here. With his family he went to Recife, the capital of Pernambuco, where he was much esteemed, devoting himself to music lessons being the most sought after professor in that city where he was the introducer of classic music.

Under the direction of his father and obeying to self inclinations, Alberto Nepomuceno, day by day, accentuated more and more his artistic personality, and he kept on enlarging his circle of friends and admirers, succeeding at the age of 18, in substituting



ALBERTO NEPONUCENO

the *maestro* Euclides Fonseea, as director of the concerts at the Carlos Gomes Club till the time of the death of his father.

He came then to Rio, without any protection and without resources. Here he lived and strengthened his artistic talent. Later on he went to Europe where he perfected himself. On his return he was appointed organ professor of the Musical Institute, of Rio, and afterwards director of that Government establishment.

Among his many compositions of true merit, and in which he reveals a prodigious fecundity of brain, we note the Romances Brazileiros a series the words of some of whose pieces were written by Juvenal Galeno; the opera Electra, a Greek subject translated in verse by Chabault, and which was performed in Paris in the hall of Saint-Barbe des Champs; Symphonies, he wrote a number for grand-orchestra; the Suile Brésilienne, on national subjects; several pieces for piano and singing; sacred pieces for orchestra. The words for his opera Artemis were written by Coelho Netto and the opera was sung with great success in the S. Pedro theatre in Rio. He has just written two other operas, the Abul and Riberto. The latter is going to be sung in Vienna.



HENRIQUE OSWALDO

Henrique Oswaldo. — He represents a great personality in the artistic world at least in South America. To give the biographical profile of Henrique Oswaldo it is sufficient to give an account of the following episode: Le Figaro, a French paper published in Paris opened a musical contest in which 600 composers from every country in the world took place, sending the pieces in sealing envelopes and without signature. From all those 600 compositions, the selected one to receive the prize was Henrique

Oswaldo's. Referring to the composition that Parisian paper wrote: We made allusion yesterday to the hesitations that seemed to prevent our jury from delivering the prizes. As to the *Il neige!* (is the composition of Henrique Oswaldo), there was not the least discussion about it. Only one vote and absolutely spontaneous! We remember yet that charming surprise and flying and delicate artistic sensation we felt when we first heard the composition of Henrique Oswaldo.

Saint-Saëns, Faure and Diémer, grouped together, for many hours around the piano had already exhausted a good number of *envois* and the session was about to end when Diémer getting hold casual of a roll of paper said: And if we should try this one? It was the *Il neige!*

Then, under the fingers of the pianist there rose an exquisite me-

lody, the intense poetry of which with the beautiful sound of the swee and wrapping dreams evoked to the imagination something of a pale winter landscape, the monotonous and slow fall of the white snow flakes under the mysterious silence of the desert field. « Nons étions conquis! » (We had been conquered) thus ends the parisian paper.

Henrique Oswaldo was born in Rio in 1853. His father was J.-J. Oswaldo, a piano merchant in São Paulo, and his mother D. Carlota Cantagalli Oswaldo, was of Italian descent.

From 1854 to 1870 Henrique Oswaldo lived in São Paulo, studied in the Episcopal Seminary, in Bart's German Lyceum and received music lessons from professor Girandon, considered then an excellent pianist.

From there he went to Italy to improve his musical studies in Florence under the direction of maestro Grozzoni, ex-director of the Benetto Marcello Conservatory of Venice and professor of the Florentine Musical Institute, and he was lead through mysteries and the secrets of harmony and counter-point.

He has devoted himself mainly to the camara music, an aristocratic and fine kind, having published: sonatas, concertos, morceaux divers for the piano, and symphonies for grand-orchestra, concerts for string instruments. In all he wrote thirty different pieces. His music is elaborated with high care and is perfect in its minutest details, of broad inspiration, transparent, it reminds Beethoven's school. At present he is director of the Rio National Musical Institute.

MENELEU CAMPOS. — He succeeded Carlos Gomes in the Belem Conservatory, in the capital of Parà state, and we cannot say that he does not honor the inheritance. He was born in that beautiful city and from his youth he revealed decided aptitude for music. His first teacher was Adelino do Nascimento, a violin virtuose of great fame in Brazil. Later on he went to Italy in 1891, entering Milan Conservatory.

He has written music for piano, singing, and orchestra. He has composed good many pieces, all of one thought and



MENELEU CAMPOS

original one perfectly distinct, somewhat melancholic. And much ean be expected yet, from the author of Notturno of the romance Tamo

He wrote minuettes and symphonies that give a sweet and untranslatable sensation of tranquility, of broad and transparent inspiration. They are a language for the soul ingeniously expressive and sweet, and the musical drawing and richness of accords show a noble and classic make up. Meneleu Campos cannot be imitated in these intermezzo pieces that he so ingeniously intercalates in his greatest works. In his minuettes and symphonics he sometimes hides, like Napomuceno the originality of popular themes, handling and transmuting them so beautiful as he does in the Miniatura dedicated to the Pará ladies; sometime he throws himself to spontaneous stream of the inspiration as he did in the Marcha Funcbre, dedicated to the memory of Carlos Gomes, or yet in the Coraes, a thick, rich, harmonious music, in which we cannot say what is more beautiful, if the beauty of the melody of thought, or the greatness of the harmonions cheeking. In our opinion Meneleu Campos is one of the most inspired musicians of Brazil.



FRANCISCO BRAGA

Francisco Braga. — Here is another much applauded name. He is a man of a sympathic figure and he knew how to make room for himself in the arena of the struggle for life, having no other means of defence but is talent.

He is a born musician and has vocation for that art. He prefers the orchestral music for his productions, having produced and executing in public concerts some beautiful symphonic pieces, poems, ouvertures, episodes. He was born in Rio de Janeiro where he received his musical education. He went also to Paris to continue his studies under the direction of Massenet.

He composed in that city several pieces which were played in two concerts: Cau-

chemar symphonic prelude; Paysage, symphonic poem, both for orchestra; Marionnettes, gavotte (which is known all over the world); Prière, Minuelto for quartette. He produced also while there: Le lever; Extase; Déclaration; Chanson; Sérénade lointaine, for singing. Scherzo; Valse romantique; Mini; Melancolia, for piano. Romance; Chanson d'Automne, for violoncello; and many others.

In Germany he eomposed: Brazil, solemn march for martial band: Marabá, symphonic poem for orchestra; Aubade, for quartetto; Oh! si te amei!; Dá-me as pétalas de rosa, romance for singing, and his first opera Jupyra.

In Dresden several of his pieces, which the musical critics referred to in the highest terms were executed in several public eoneerts in 1898.

He is now awaiting the opportunity to put on the stage of the Imperial Theatre of Munich, his opera Jupyra, which has already undergone the criticism of one of the first celebrities in Germany — the maestro Hermann Levy. This critic among other things said that his advice was: « do not strike out a single note from this opera » — so perfectly identified with the poem did he find it.

MILANEZ (Dr. Abdon Felinto).— Is perhaps the most popular of all the composers of popular music. His compositions are executed in every theatre of Brazil, as if he had promised to himself not to do anything else but write music for all the audiences and all the people of the country.

He was born 40 years ago, in Areias, a modest city of Parahyba State, which can be proud of having exported great artists for the other corners of the country. He distin-



ABDON MILANEZ

guished himself as a railway civil engineer having been graduated in the Polyteehnical College of Rio de Janeiro, in 1881, he was in office several times, as land inspector, director of the emigration service, in Europe, and other capacities. To-day he is a Congressman representing his native State in the Federal Congress.

His notoriety, as it is natural, was acquired mainly by the inspiration of his theatrical compositions, which were always executed with success. He had already composed a large number of pieces that had become popular, when in 1886, his comic opera, in three acts *Donzella Theodora* was sung in the *Sant'Anna* theatre in Rio. The music of this operette so light and original was received with great applauses, and the success was complete.

Encouraged by this triumph, and having become the idol of Bra-

zilian audienees, he was inspired with the full power of his noted humour and gaiety and wrote some quite original plays: Heroe á força, comic opera in three acts; A Dama de Espadas, comic opera also in three acts; Moema, lyrie drama in one act; O Barbeirinho de Sevilla, operette in three acts; the spectacular magic plays: Flor de Maio; A Fada Azul; O Bico de Papagaio, all in three acts, and several other plays. All of them met with great success all over Brazil some being performed hundreds of times and some pieces from these comic operas are most popular and are executed all over in concert halls and whistled in the streets as a live expression of the race and of the people's sentiments.

With popular music, no composer national or foreigner ever achieved such success in Brazil.

He is for the Rio theatres what Planquette was for the Parisian ones for many years, and Abdon Milanez does not devote himself entirely to that light music.

He also wrote for the Church and writing sacred music he undergoes such a transformation that one of his *Te-deums* is the one most frequently heard in the Rio ehuches.

Here is a list of the musical works of this noted Brazilian operette composer with the names of those wo wrote the words: Donzella Theodora (3 acts), Arthur Azevedo; Heróc á Força (3 acts), idem; A Dama de Espadas (3 acts), dr. Moreira Sampaio; O Barbeirinho de Sevilha (3 acts), E. Garrido; Pintar o Padre (1 act), D. Castro Lopes; A Loteria do Amor (3 acts); Coelho Netto; Ninon (3 acts), D. Castro Lopes. Magicas — A Princeza Flor de Maio (3 acts), E. Garrido; A Fada Azul (3 acts), idem; O Bico de Papagaio (3 acts), idem; A Chave do Inferno (3 acts), D. Castro Lopes; A Mosca Azul (3 acts), Valentin Magalhães. Reviews — O Zé Povinho (3 acts), dr. Vincente Reis; Comen! (3 acts) Arthur Azevedo. Opera — Primizie (1 act). Heitor Malagutti. Drama with music — Mocma (3 acts), Corida Coaraey.

Abdon Milanez has besides these plays composed a number of songs, romances, dancing and military pieces, etc. Some have not been published but they all have been often and often played and are quite popular, which constitutes in a certain way the definite consecration of the musicians.

Carlos de Mesquita. — Has a long list of compositions and an opera *Esmeralda*. Besides him we have yet a number of others: Henrique de Mesquita who has composed so much music for the

stage, gay pieces in the Offenbach style. Delgado de Carvalho a grave composer of high music who wrote a short opera *Hostia* and another one *Moema* both of which were successfully sung in Rio de Janeiro. There are yet A. Vianna Pacheco, Barroso Netto, Nicolino

Milano and many others, who are musicians of great merit sustaining the good name that in the world of Art Carlos Gomes won for Brazil.

It is well known abroad that, outside of Europe, the only country that succeeded in having an opera of its own performed all over the world in the leading cities, was Brazil with that famous and magnificent Carlos Gomes' opera « Guarany ».

The cultivation of music as well as of other liberal arts is maintained with eare. The go-



CARLOS DE MESQUITA

vernment supports officially Music and Fine Arts institutes in Rio de Janeiro, and some of the State Governments of this Republic follow the example, and this explains the number relatively large of



Rodolpho Bernardelli

good artists to be found in Brazil. In this regard no other South American country comes near this republic.

* *

We will now speak of the Brazilian Sculptors:

The place of honor belongs by right and in fact to Rodolpho Bernardelli, the celebrated sculptor who has populated with statues the capital of Brazil. There are here in Rio and elsewhere statues made by European artists of reputation, for large sums of

money, yet confronted with the work of this Brazilian they do not justify that preference and are not in anything superior.

Benardelli was born in 1852 and in 1870 he entered the Fine Arts Academy of Rio. Three years later he had executed his first work — David, soon afterwards he sculptured a Saudade da Tribu and A'espreita, both of which received prizes at the Philadelphia Exposition. In 1876 he earned a prize annually given to the best student of the Academy which prize consists in going to Europe to continue the studies at the government expenses. He stayed nine years in Europe perfecting himself and producing.

On his return he executed a monumental group Christo e a adultera, which belongs to the Academy, and the Faccira which excited the art critics with enthusiasm. Later he sculptured Santo Estevam, and three statues: Osorio, Alencar and Duque de Caxias, all of which are to-day in Rio's public squares, all of them of bronze and two of them, those of Generals Alencar and Duque de Caxias, on horseback. His last work is that magnificent group in bronze, representing the discoverers of Brazil inaugurated during the festivals of the celebration of the fourth centenary of the discovery of Brazil. This work of art by itself is enough to give him the great name as an artist he has and so richly deserves.



R. Bernadelli Christo e a adultera

Bernardelli is fond of naturalism, in art; in his work he places himself at the disposal of the plain truth and he doesn't deviate from this happen what it may:

His statues are always a theme for discussion among the critics, whom, as it is usual, never agree in their opinions as to the artist. The sculptor doesn't pay any attention to them. If such an hero used to mount his horse in a manner that was not correct, he reproduces him just so in the bronze; if another had his stomach distended somewhat more than it is idealized by the standard fixed by the legends for their idols, he cares little for that, he rounds the marble true to his model. And as to convencionalism, which is a criterion for the art of the crowds,

that expands itself in reprovations, in strong criticisms in the newspapers.... le papier souffre tout.

Notwithstanding all that, Bernardelli has also his admirers,

and, besides, nobody can refuse his title as a genius affirmed by immortal bronze statues.

The list of works executed by this first of Brazilian sculptors is a long one. Besides all these statues to be seen all over the eity in its public squares, there are numberless low relief busts, medallions, and other works in bronze and marble sculptured by him. Of late he executed a statue of *Carlos Gomes* for Campinas and two others of *Teixeira de Freilas* and *Visconde de Maná* for Rio.

In Brazil artistic eircles Bernardelli is the most respected personality of all the artists in the country. He has imposed himself by his talent and if he is not a millionaire he can say as Emerson did: real pride is worth an income of £ 1.500.

Corrêa Lima. — This name is another document of Brazilian Fine Arts culture. Is a revelation and a promise. He has the sense of the beautiful and by energetic work has acquired the savoir faire of the sculptor, who perpetuates himself, by perpetuating others in his marble.



CORRÉA LIMA

The certificate of his genius was seen in the Rio Fine Arts Exhi-



CORREA LIMA. - Mater Dolorosa, belonging to the Fine Arts Institute.

bition, where he exhibited his bronze statue $Pag\acute{e}$ powerful in its natural expression.

Corrêa Lima is one of the most beautiful and best defined artistic personalities of South America. Though quite young he has by himself acquired the reputation of a superior artist. He was a pupil of Bernardelli and frequented the Fine Arts College in Rio. He was born in the State of Rio, in the small city of S. João Marcos, in 1878. He followed the full course of that college during three years and it was a surprise, not only for the public, but even for his college mates and professors, the exhibition of his work in marble « Remorso » which won for him the prize of a trip to Europe at the expenses of the Government. While in Rome he developed a feverish activity, producing among other works the « Prisioneiro » a great work in bronze, where he exhibited his independence and self individuality qualities, well evident in a more or less vivid manner, in all his works.

In the Fine Arts expositions of 1901, 1902 and 1903, in Rio, he



LUDOVICO BERNA

won 'the first prizes with his works, Pagé, S. João Baptista, Remorso and the Pescador, and others.

His chief work of art, the one which won for him the celebrated reputation he enjoys was that painful group Mater dolorosa, a genial association of the classic art inspirations with the preoccupation of natural art, full of emotions and truth.

Lubovico Berna. — He is also a young artist and his name is being the object of articles in the technical periodicals and daily papers.

He is an architect of talent. The altar he built

for the Benjamin Constant church is a real gem of work in the gothic style worthy of great praise. BITTENCOURT DA SILVA. — The untired worker Director of the Arts and Trades Lyceum does not need any better proof of his talent than the front of the Exchange Building. The whole building is the product of the purest *Renaissance* school, adding to the nobility of its lines, the elegance of the decorative details.

In São Paulo the Brazilian architects fill that city with beautiful mansions, affirming Brazilian advancement in arts. In the North we can mention:

Hans Schleiaer, of Bahia. — He has had to struggle against the smallness of the centre where he lives, yet succeeds in impressing a sign of his renovating spirit in a few private buildings he has built up. His best works are the residences of Messrs. J. Gama and Costa Santos in Victoria and that of Mr. F. Hasselman in Victoria Square. He also built the large business house of Mr. Deoc. Alves at Princezas Street, the City Hall in São Felix and several others. He has also worked in several eities of Germany where he now is.

Sousa Aguiar (Francisco Marcellino) .- This is, no doubt the best known of Brazilian architeets and he is as well a General belonging to the engineering company of the Federal Army, He was born in Bahia, From his very youth he revealed notable qualities as a military man and an administrator. He was for many years the Chief of the Fire Department in Rio. which is one of the best in the world, there being no equal to it anywhere else but in the United States. He was also at the head of the telegraph system of this country. In



Sousa Aguiar

both of these offices he discharged his duties in a most clever way.

He is a highly educated man a cultured scientist and a linguist which is of great help to him while on commission in foreign lands, that he has done several times representing his country with great advantage. He represented Brazil in the Chicago World's Fair and in the St-Louis Exposition. In this latter exposition, the Brazilian pavillion, as the American press said it, excelled those of all the other foreign nations. Sousa Aguiar has many aptitudes is a man of strong character and superior mind. The feature that can most easily be appreciated by the people is his talent as an architect. He is now building a beautiful Palace for the Rio National Library, the Fire Department barracks, the St. Louis Exposition building which was brought from the United States. He has in project a building for the National Congress. We need not mention the Brazilian Building at the Chicago World's Fair which was a fine building.

Sousa Aguiar is in fact a great artist. His works are beautiful, original and up-to-date.



RAMOS DE AZEVEDO

RAMOS DE AZEVEDO. - (Francisco de Paula Ramos de Azevedo) is the most notable architect from São Paulo of those living there to-day. He is an extraordinary artist. He has built some 400 buildings both public and private ones in the State of São Paulo. We might say that it is to him that São Paulo owes its architeetural transformation. Among the buildings he projected and built we must mention the Polytechnical college, perhaps the nicest in all Brazil. He himself is a professor of architecture. He also built the Secretary of

Treasury's building and the one of the Agriculture's Secretary, Police Headquarters, Normal college, Prudente de Moraes School,

Municipality Palace in Campinas, the large building of the Santos Docks Company in Rio, the Bray School, the Military Hospital, both in São Paulo, and many fine residences and some millionaires mansions in São Paulo. In a word, he is the most enthusiastic promoter of the intellectual and artistic movement in São Paulo in the last few years. We had forgotten to mention the beautiful building of the Fine Arts and Trades Lyceum, of which he is the President and to the organisation of which he gave a practical character, transforming the Lyceum into many shop works for artistic and industrial production.

He is a good and patriotic man, clever and progressive in his ideas. He is also a philantropical man charitable and generous. He is to-day one of the most popular and respected men in São Paulo. Not long ago a journalist writing about him said: « We know not a man in São Paulo with a better heart or a superior mind to his. »



OLIVEIRA PASSOS

OLIVEIRA PASSOS. — Son of the celebrated engineer and administrator Passos. He was born in Rio de Janeiro, but followed his studies in Germany where he was always distinguished as a good scholar.

Returning to Brazil he made his career as an industrial man and an architect occupying to-day a prominent place among his colleagues.

In a competitive examination for the selection of plans for the Municipal Theatre his won the prize and were selected. The building is nearly finished and with it he made a name.

HEITOR DE MELLO. -He-is a Brazilian architeet of recognised ability in the artistic circles of Rio. He is a son of the late celebrated admiral Custodio de Mello, This young but already well known architect was born in Rio in 1875 where he made his first studies. Afterwards he travelled a good deal in Europe and returned to Rio where he followed the Fine Arts College course, with high distinction graduating as an architect, a diploma not easily obtained in that college.

Heitor de Mello has ever since devoted him-



HEITOR DE MELLO

self to his professional work with enthusiasm and has built some most beautiful buildings, as the Navy Infantry barracks and many private mansions, being worthy of mention some beautiful buildings in the Avenida Central.

Heitor de Mello ranks to-day with the best of his class and is had as one of the ablest. His works recommend him by its strong features that bring forth harmony, distinction and novelty.

PAULA FREITAS.—His name is connected with Candelaria church in Rio. Candelaria is the richest and most artistically built church in South America.

Paula Freilas gave the plans and excented the architecture of its

interior. He also built the National Printing Office building with a most original front, popular already, having been, as it has, in mostly every magazine published in the country. He built yet the Gonçalves Asylum at S. Christovam square and other buildings.

Let us now write about Brazilian artists — the painters.

Not many months ago Brazil lost his most eelebrated artist whose renown did not limit itself to Brazil, being universal. He was living in Europe at the time of his death. His name was *Pedro Americo*.

Aurelio de Figueiredo. — He is Pedro Americo's brother and is also a painter. He is untired with his brush and most audacious in the coloring, alive and bright in the whole make up. He cultivates with success historical themes. He paints with ease and on all subjects, landscape or any other. According to the art critics his best work is his painting *Paulo e Francesca* where the fundamental qualities of an artist are in evidence.

Nearly every one of his paintings are in Rio in the hands of amateurs, in public buildings, a few in the Fine Arts College and a few others in Buenos Ayres, Argentine Republic. His two last paintings « A descoberta do Brazil » and « Um capitulo da historia patria » are, one, in the President's palace, and the other in the House of Deputies where the eongressmen meet.

Rodolpho Amordo. — One of the most famous of the Brazilian artists, having, notwithstanding, devoted himself to a most difficult kind of work — historical painting. This does not mean that he has not done some other kind of work because he has painted quite a number of landscapes, marine pictures and others, but history is his favorite style and in that line has produced far more than in all others. He belongs to the new generation and was born in Rio de Janeiro.



ВОВОГРИО Амоеро

His artistic education began at the Arts and Trades Lyceum, of Rio, continued at the old Fine Arts College and he perfected his studies in Europe, where he went at the government expenses, having received the prize offered yearly by the Fine Arts college.

His paintings O Tamoyo, Maraba and others representing Brazilian history subjects, belong to-day to the State Government

are strong evidences of his prowerful inspiration and patriotism as well as true works of art. A *Morte de Abel* is another painting with which Rodolpho Amoedo answered to the classic tendencies of his surroundings at the time he did that work.



R. Amoedo. — A narração de Philetas; belonging to the Rio Museum.

The best reputed of all his works, however, is A Narração de Philetas, celebrated painting acquired also by the government for the collection of the State Museum. The softness of the lines, the relief of the figures, the subtile poetic sentiment of the scene in this painting, give altogether a real and harmonious coloring. This picture is considered the gem of all those at the official Art Gallery. Rodolpho Amoedo is minucious in the anatomic study of the figures, — as it must be done in historical painting, — and he knows how to place them in position with artistic taste and as a master will. He seems to possess the secret to do it with perfection. Add to these virtues the complete control of the brush and paints for the soft marvels of the coloring and there remains explained the success of this artistic celebrity, to-day professor of the Fine Arts College where he was once a student.

Antonio Parreiras. — Born in Rio de Janeiro, had as his teacher the celebrated German landscape painter Jorge Grimm. But it

seems that above his professor he loved this marvellous nature of Brazil. He has abondoned a long time ago the style of his teacher and created an independent individuality of his own. The landscape

will however continue to be his love, his inspiration. At present it would be difficult to find a landscape artist so faithful, with such adoration and care for the reproduction in his pictures of the trees, the woods, the mountains, with such delicate coloring copying the charming pieces of scenery that nature in Brazil offers to the artist. He knows how to see his original and how to fix it in his painting.

His monumental painting Sertanejus, is in one of the drawing-rooms of the President's palace. He has a large number of smaller paintings, which are disputed by



ANTONIO PARREIRAS

the experts in art. They are, most all of them, pieces of Brazilian scenery. The painting *A Derrubada*, which was sold for a high price, is one of the most beautiful ones as it is the one — Ventania, — both of which will some day adorn some celebrated art gallery. Some of his beautiful paintings decorate the walls of the Court Room at the Rio de Janeiro Supreme Court.

Rodolpho Chambelland. — Rodolpho Chambelland is an artist of reputation, though he is quite a young man. He was born in Rio, and received his artistic education at the National Fine Arts College. He became popular by exhibiting paintings of Rio scenes at the Fine Arts College every year with greater success. One of these — « A'Sahida do Baile » (Leaving the ball) won for him the prize of one year's trip to Europe at the Governments expenses. Another canvas which won a great triumph for him was the « Ar Livre » (Bachantes em festa) exhibited at the annual Salon of Rio in 1904. According to a critic, who is not a very lenient one, what distinguishes Chambelland is the harmony of his compositions, always original, with excellent effect of light and dark light, the free movement of the figures, the landscape always broad and well illuminated, the happy perspectives, and the fine sky, which proves the neatness

of his brush, and the attention he pays to the minutest of details. Rodelpho Chambelland is besides all that a hard worker, producing



RODOLPHO CHAMBELLAND

a good deal, appearing in all exhibitions of fine arts, held yearly at the College where he is always sure to win the best prizes though he has competitors of great merit.

Henrique Bernardelli. — Is also one of the most noted cultivators of pure art in Brazil. At the service of a legitimate artistic temperament he has a solid intellectual cultivation, and as a result of that we see the superiority of his work among which we recommend the fresco paintings of the ceiling of the Musical Institute Hall. Among his most applauded paintings is the Tarantella, a strong study on habits and customs, of gay coloring and irreprehensible execution, Meditando, Syvia, Ruinas em Ravello, nostalgic landscapes, of soft coloring. Casas Brancas, Praia de Copacabana, are delicate landscapes because of their subjects, but they were treated by a strong and warm brush, which leaves in the picture a bright impression of life, attracting and palpitating.

But landscape is not the only style in which H. Bernardelli reveals himself as an artist and a creator. The intellectual history of Brazil has charms for him and inspire him most enthusiastically. We see that in his paintings José Mauricio deante do Rei whose vietures have the animation of real life; o Aleijadinho (the eripple) in our opinion to the latter in the disposition of the figures, in the ensemble and in the coloring; the Extase, that seems an introduction to the symbolism in painting. It is a revolutionary painting, under the view point of elassie art, and is a doeu-



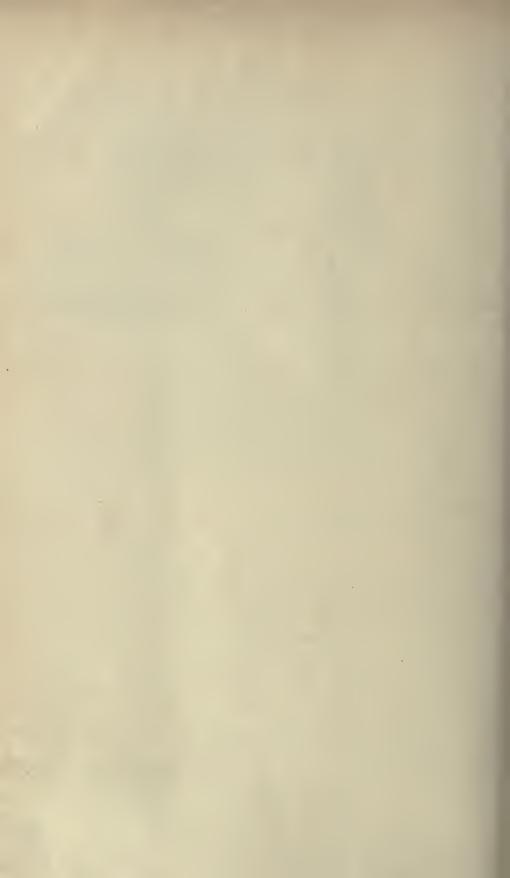
HENRIQUE BERNARDELLI

ment of the audaeious soul of this Brazilian artist.

ELYSEU VISCONTI. — A student of the National Fine Arts College, studied also for some time in Europe. On his return he presented some paintings that made a name for him among the most noted artists. He tackles all subjects and every style. He has worked on oil paintings, water colors, pastel, religious and historical subjects, landscape, decoration and others.

Decio Villares, artist of great merit; Zeferino da Costa, saered painter whose talent is in evidence in the «plafond» of the «Candelaria» church; Veingärtner, the inspired son of Rio Grande State whose paintings are so minucious in detail, so earefully treated and so patiently finished. They have been all sold at high prices. J. Baptista and many others though not so popular as the above are all artists that contributed considerably towards the impulse Fine Arts have received in Brazil.





STATES

HISTORICAL, GEOGRAPHICAL, COMMERCIAL AND ADMINISTRATIVE DATA;

DESCRIPTION OF CITIES AND PLACES WORTHY OF NOTE,

CHURCHES, MONUMENTS, ETC.



THE STATE OF THE AMAZON.

Once finished, as it is, in the preceding pages, the review of the Brazilian intellectual world, we must now deal with the physical and political one in the complexity of their many aspects: — industries, commerce, public instruction, railroads, etc. What we are about to write, is the result of personal observation and study, during our travels all over the country, going from city to city. We will begin by the Nothern States. At the extreme north, as the doorway of this great nation we have the Amazon State, well worthy of the grandeur of this beautiful country, being its northern boundary line.



Dr. Constantino Nery, governor of Amazon State

Just as Rio Grande does at the extreme South, the Amazon opens with a marvellous and exquisite majesty its frontier to the new-comers from all over the world.

As to its frontiers, Brazil has really much to thank God for the

generous way it was treated while the distribution of natural greatness was made among the people of this planet. But this Amazon region has not as yet been exploited, only a small part of its territory and of its wonderful waters being dominated by man, by the Brazilians, we might say, as the Europeans seldom go there. Every one of the explorers, scientists and travellers, who have penetrated some of its thick roads, its endless rivers, come back astounded, and praise enthusiastically that infinite and ealm wealth, that is waiting for the future generations, and spreading in flowing



Dr Silverio Nery, ex-governor of Amazon State

stream, a variety of things, that cause the envy of men, through a territory larger than the majority of the different kingdoms of the earth. Its enormous surface surpasses that of England, Germany, France, Italy, Holland and Belgium put together.

This part of the Brazilian dominion, taking the name of a river, the largest river in the world, rendered a poetic demonstration of homage to the most powerful abyss of fresh water that there is on this planet. It is impossible for us to repeat here what Humboldt, Agassiz, Condrean, Osculati, Wallace, Castelnan and many others have said about the Amazon. The trip alone from Belem, the capital of Pará State, to Manáos, the capital of the Amazon State, is in itself a panorama that can't easily be forgotten. We made this trip once and we will never stop bringing to the eyes of our mind the beautiful images of that magnificent scenery. On the 31st of July 1902,

on board of a steamer flying at its stern the Brazilian flag, « O Alagoas », we sailed from Pará, in the direction of Manãos. It was five o'clock in the afternoon and the weather was splendid bright and not too warm.

We had to sail some 900 miles. A short section of that colossal river.

The mute riverside landscape is of itself perfectly charming, but, bending over the deck railing we were completely wrapped up in the contemplation of the whole scenery, a synthesis of unseen coloring and light changes.



View of the town of Manaos.

Until we reached the bay of Marajo, the steamer was crossing a large moving surface of pacific waters, shining and clear as a looking glass, from the bosom of which were brought forth green streams of a loving and solemn vegetation: gay and round islands, quite wet, as coming out of the bath, others symetric in their green dresses, but an even green, thick, without shades treated as if with brosse-carré. Those particles of tranquil land, are sown here and there but a little every where, and sometimes they appear at the

right, sometimes at the left, looking sometimes as if they were encircling the steamer, or floating anywhere as if suspended between the light and the moving waters. When the boat seems to advance towards one of them, and makes close by the contornation of the green silhouette, suddenly they divide themselves in two, and we then see that they were really two and not one. The vegetation so full of damp and bright vigor, is understood in the inexplicable poem of its details, of its trunks and branches, of its epyphites and



Manãos. — Eduardo Ribeiro's Avenue

of its parasites. Bye and bye the islands seem to disappear, they hide themselves from view. The boat runs swiftly and smoothly in large tracts of free sea, the sea-shore, the banks of the river, are far away, with a grayish color brought by the wet fog that rises between, and everything seems to soften in a vast and melancholic silence, in a solemn solitude of the spreaded out waters. And this, not because the banks are desert. In a little while, when the river becomes narrower by the sudden emersion of new islands — and

they are numberless — we discover here and there, spots argil color, noisy sounds in the harmonious neutral green of the trees. They are the houses: — A brick factory, a «barraca». Going nearer we distinguish everything: — a defiant factory chimney. Sheds covered with reddish tiles, or a zine roof house shining with the sun. When, through the thick islands, the boat reaches Marajó, the horizon runs again in circle, and a tired rest fluctuates upon the vast sheet of water; there are no waves, there is no noise, one



Manáos. - State 's Treasury and Receiver's office

would think we were before a picture of the geologic period of the dominant waters.

The following day we ran early in the morning to the deck railing, we wanted to see that sea-river, as very properly they call it there. The Marajó bay has been left behind, quite far now, and by this time, the steamer was sailing already through new islands, new groups of islands, through extensive corridors, now wide, then narrow, in that great maze of the Amazon river.

When it happens that the «Alagoas» runs softly a little closer by one of those islands, what happens at every moment, from the ship we can distinguish with full detail the different kinds of vegetables which abound in the most variegated assortment of kinds, and the thin and tall gems of the miritys and of the assahys are swiftly remaining behind the boat. Some of the cehoes of that live symphony of the forest reach our ears. With such points of referenee we re-enter in the conscience of the speed and the road that has been covered, but the more we advance more waters appear to that requested vision. In the places where the river becomes narrower, by the development of the islands spreaded all over, and which never allow us to see the true banks of the colossal river, a thick sheet of algas luxuriant and impenetrable, together with trunks and branches of enormous trees, ones intermingled with the others, close the waters in a longitudinal and endless line, opening every now and then the breathers of the muddy igarapés, melaneholic paranás, of the furos in whose sinews divagates the gray and nostalgie magnary.

Each division of that maze is visited by the montarias — as they call the small canoe boats used by the humble inhabitants of that region, busy in the fishing of the turtle, the tasty jaraquy, the prime fish of the Amazon, the lacunaré, the ucuráo-assù, the pacù, or of the popular tambaquy. But the high road is the streamy river, always muddy and dirty, in spite of the poets singing phantastically its crystaline waters. It is that way that the unempeached and triumphal boats, large and small, go on in their pilgrimage, nourishing the ever growing commercial traffic of the Amazon States and neighboring nations.

From among the steamers we will refer to the gaiolus, steamers of a peculiar type, appropriated for the sailing in those waters. They are wide open, well ventilated, flat bottom. They are audacious and their number is large. They run in all directions the vast hydrographic net of the Amazon, earrying life, and civilising activity of the commerce, under the national flag, to the most hidden corners of the inhabited region.

A large number of them belong to the Manáos market, the majority, however, belong to firms of Belem, capital of Pará.

The Amazon, we will repeat, is the great road, the only road of those wealthy and immense regions to the intercourse with the eivilised world. There are no railways in the state of Amazon, neither are there even any earriage roads. There is only, and that in excess, a large sea of fresh water, noisy and rapid, which, with

its many affluents, forms the most complete and stupendous system of roads open to the communication fury of the commercial and industrial life of to-day,

The peculiarity of locomotion in this system, are the gaiolas, the affirmation of a deep human initiative in the enterprize of dominating the aquatic desert, the first document of the ability of the Brazilians, the shipowners of Pará and Amazon, for the achieving of that conquest of a world which is yet closed, a conquest that represents the most daring geographical feat of the century just ended.



A Part of Eduardo Ribeiro's Avenue

That fleet, which has not as yet reached its possible development, is already this day the largest of the South-American continent, and can only be compared to the other one that dominates in the north the other great river, the Mississipi.

These boats navigate about 10.000 miles, transporting the great treasures of the Amazon — the rubber gathered in the many seringues and sent to the ports of Manáos and Pará which export it to markets of the whole world.

Navigating in all directions, they take sometimes one, two,

three months, going from barraca to barraca at the docks or storage houses of the principal places, unloading their eargoes where the owners of the scringaes get their provisions from so they can supply their men during the rubber harvest. Coming down they call at the same places if it is time to receive the rubber already prepared.



Manáos. — Monument of opening of Amazonas river to the international Trade

These docks are wooden bridges sometimes with a large wooden storage-room called — barração —.

As this name of barraca or barracão given to these establishments situated in the river-banks can induce to a false notion, we

will state right here that they are no tents, as the word might imply, but a shop and storage-house, some of them with a house for the proprietor's family just with the same comfort as the houses of farmers in Europe. In the Purus and the Madeira rivers we can see many of these houses which would cause the envy even of residents of many a city.

But the gaiolas do not do all the traffic of this river. Nearly every week a steamer goes from North to South of the country,



Manáos. — Public Market

from Rio de Janeiro to Pará, and from there to the Amazon. Calling at Ceará, Piauhy and Maranhão there is another line with a monthly steamer. Twenty English steamers are working, sometimes two and sometimes four a month, in this line, taking the Amazon rubber to the ports of New York, Havre, Liverpool, Hamburg, Lisbon and Oporto. There is also a steamship company belonging to the Portuguese house Andresen which is engaged in the same trade to New York, Liverpool, Lisbon and Oporto.

Thus is that the Amazon region is in frequent and swift contact with the principal European and American ports.

Until a certain time, 1866, the Amazon river was not open to the commerce of the world, but in that year an Emperor's decree opened it to the traffic of all flags, which, attracted by the wealth of that region, began to explore it, slowly at first, but in large scale after a while.

In 1865, Agassiz, who visited the mighty river, wrote about it: «In these waters, in which we met but two or three ships in six days, steamers and ships of all kinds will go up and down and life will animate these regions.»

This prophetic assertion was realized. To-day we can't go up or down that river without meeting every short awhile some kind of boat, filled with people and loaded with eargo, running in all directions. The local government spends annually 1.980 contos with subventions, in order to augment more and more the maritime activity of this region.

Besides the Brazilian steamers, large and small ones, navigate these waters German, English and Italian transatlantic steamers, but it is right to say here that the majority are Brazilian boats.

To have an idea of the navigation traffie, we give here a table of the movement in Manáos port in 1901.

					ŀ	ENT	RH	ES						
Steamers													696	
Launches													328	
						To	tal					٠	1.024	
					S	AH	AN(GS						
Steamers								٠					711	
Launehes	,												311	
						To	tal				,		1.022	
NATIONALITY OF THE BOATS:														
	ENTRIES													
Brazilian					٠			,					903	
English.													101	
German.							٠	٠			٠	٠	11	
Italian .				•				٠	٠		٠		9	
						To	tal						1.024	
					6	4.11	JNC	10						
					0	AIL	.1.11	10						
Brazilian	•			٠		٠	٠	٠	٠			•	901	
English.							٠						101	
German.				٠									11	
Italian .													9	
						To	tal						1.022	

If Agassis could verify to-day the size of his prediction, he would have no small surprise in looking at these figures.

This enormous development of the navigation in the Amazonie basin is fed mainly by the large producing capacity of the two States. The rubber production is worked by national laborers.



Mauáos. - Eduardo Ribeiro's Avenue-Commercial houses

The Rubber. — The rubber, seringa, or gomma elastica, is made of the juice of several trees of the Amazon valley as the syphonia elastic, syphonia cabuchů, jatropa elastic, heven guyanensis, syphonia raythidocarpa, etc., the most common being the best—the havea and the syphonia clastic. They attribute to a eatholic missionary father Manoel da Esperança the discovery of this substance of common use among Amazon inhabitants. He came to know it in his pilgrimages among those people and brought it to the knowledge of the civilised world.

Later on, the astronomer La Condamine took it to France, presenting on this subject, in 1745, a paper before the Paris Academy

of Sciences. Only later on the English thought about their India rubber.

The way to gather or extract the juice of the seringueira has so often been described that we will not take up the readers time with it.

In the beginning the exploitation of that product was insignificant; some 20 years ago, however, with the multiplicity of industrial applications, increasing as it did, the demand in Europe and North America, the States of Pará and Amazon began to develop in a large scale their forest industry, and the export of seringal reached figures never dreamt of.

A fact must be accentuated most emphatically: It is most exclusively to Brazilian labor that this conquest is due. It was the native laborer, mainly from the State of Ceará who penetrated more andaciously this mysterious solitude of the large rivers, establishing, organizing the « seringues », the first base of the conquest for the universal intercourse, for the exploitation of that wealthy product of the mighty river region.

Some statistic data will reveal in a better and plainer manner the development attained :

RUBBER EXPORTED BIJ PARA AND AMAZON STATES:

Years		Kilogr.
1858 a 1862.		997.280
1863 a 1868.		3.365.348
1877 a 1881.		12.280.532
1887 à 1889 (1	hree years) only the port of Manáos	9.511.994
1890 a 1892	id. id.	11.272.954
1893 a 1895	id. id.	27.671.456

An interesting table for the verification of the productive progress and energy of the Amazon State is the following official statistic:

RUBBER EXPORT FROM THE PORT OF MANAOS:

Annos							Tons.	Annos								Tons.
1880.							374	1889.								3.255
1881.				٠	٠		307	1890.								3.693
1882.							430	1891.								3.991
1883.							665	1892.								3.812
1884.				٠	٠		1.013	1893.								4.745
1885.							1.462	1894.								3.753
1886.							1.574	1895.						٠	٠	5.433
1887.	٠	٠				٠	1.688	1896.								6.827
1888.							2.141	1897 f	irst	six	m	ont	lis			4.285

From that time on the production follows a constant progress.

According to official declarations the production in the Amazon State alone in 1900 was 14.581.880 kilgrs., in 1901, reached 16.851.343 kilgrs. of the three qualities, fine, sernamby and caucho.

Yet, the reader must not be led by these figures to think that rubber is the only product of the exploitable wealth of the Amazon.

In the following table, from a reliable publication, we will see a full variety of goods exploited at present by the Amazon people exported from the port of Manaos. In this table are excluded goods that come from neighboring countries, and pass in Manaos only in transit increasing its commerce. We will afterwards give a table of those goods in transit.

GOODS PRODUCED BY THE AMAZON STATE IN 1901.

	Entering the port	Sailing from the port
Rubber « fina »	kilos 11.895.237	9.987.179
Rubber « sernamby »	» 2.231.453	1.873.547
Rubber « caucho »	» 3.798.029	3,490,566
Piraraeù dried salted fish	» 489,854	545.050
Tobacco	» 57.852	
Copahyba ail	» 7.594	9.182
Deer skins	» 2,489	2.478
Cattle skins	» 3,351	153.077
Cocoa	» 60.701	55.525
Piassava	» 210.016	180.099
Corn	» 1.750	_
Guaraná	» 678	678
Jutahysica	» 15.185	18.520
Puxury	» 822	167
Parseley	» 405 ⁵	260
Precions shefts	» 82	
Sheep skins	» 6	1.628
Pig skins	» 14	
Skins	» 109	180
Carajurů	» 5	5
Mururé	» 8	
Cumarú	» 7	28
Tueum	» 40	
Birds feathers	» 2 ₉₀₀	9850
Mixira	tins 505 ⁵	251
Butter	litre 144	5.697
Lumber lathes		-
Lumber boards		41.512
Chestnuts	heet. 57, 969	57.666

Due to this varied and valuable production the Amazon State can already take the third place among the different States of Brazil that export the most, comes right after São Paulo and Rio de Janeiro in the following proportion: EXPORTS FROM THE PRINCIPAL STATES OF BRAZIL IN 1901

 São Paulo
 501:768\$495

 Rio de Janeiro (capital)
 155:926\$723

 Amazonas
 90:085\$455

 Pará
 76:052\$597

 Bahia
 61:686\$764

The total of exports and imports from and into the Amazon State in 1903 was 100.000: 000\$000.



Manãos. - Garden of the Governor's Palace. - The west side

The goods in transit through Manáos, coming from Bolivia and Peru in 1891 was:

							Entered	Sailing
Rubber	((fin	a »				$2.844.886^{\circ}$	2.844.886 ⁵
id.	((Ex	tra	-lin	a »		79.299	79.299
id.	"	Sei	rna	mb	y »		592.147750	592.194750
id.	((Car	uel	10 ×		•	45.945	45.945
Piassav	a						51.252	51.252
Deer sk	iı	ıs.					25	23
Tobacco	0				٠		17.565400	17.565400
Chili ha	115				٠		760	760

The products of the Amazon State exported in 1891 paid to the State Treasury:

The rubber exported during the year of 1901 had the following destination:

			-		
			« Fine »	« Sernamby »	« Caucho »
Pará			165.167°	22.400	15.578
Rio de Janeiro					****
Havre			600.480	94.556	315.676
Liverpoot			5.772.556	607.458	1.639.037
ttamburg			64.956	11.571	6.552
New York			5 586.040	1,137.962	1.515.943
			$9.987.179^{\circ}$	1.873.547	3.490.566

The Climate of the Amazon. — The Amazon is one of nine States of Brazil where there are Indians yet to-day. These primitive inhabitants of Brazil are disappearing at the proportion that the natives of Ceará and other Northern States penetrate into valleys and accessible forests. And this beneficial invasion grows larger every day. Then it is not true, as they say, that the elimate of this region prevents the existence and the extending of the population. Most assuredly this is not so. The expression — torrid region — doesn't mean anything but a geographical paradox for a long time. The «unbearable heat of the tropies.» in what concerns that region washed by the great brazilian rivers in the northern part of the country, it is a legend, a fiction that remained from the stories told by the travellers of old, and that proves the truth of that French saying: A beau mentir qui vient de loin....

The heat in this region is neither in excess nor is it constant, we say that a result of our own experience having been there for a whole summer month. The great surface in evaporation, formed by several currents of water of that hydrographic system, the prevailing winds during the summer season, besides other causes, explain the relative mildness of the climate and normal temperature, reasonably bearable of that region.

The learned Maury, whose statements on such subjects can't be but respected, assures that: « there is always there (in the Amazon) a pleasant weather, in spite of frequent showers in certain seasons.»

By its turns, one of the men who treated with more seriousness the Amazon subjects wrote in a book which deserves the respect of being considered authority: « The heat is strong, but never as in New-York, or even in Portugal or Spain where the men working in the fields are suffocated by it. » And further on he adds these words written by Herbert Smith who travelled through a large part of this region: « I went all through the Amazon during four years and never had a fever, yet I caught it in Ohio, in the United States where I was but three days. It is about time to put an end to these faney traditions, it is about time to tell the truth, repealing firmly these false



Manáos. - Cathedral church and Square

notions, admitted and repeated, about the elimate and health in these regions.

The Barão de Marajó, who registered thermometric observations, during several years, about the climate of Manaos, observations made with all care three times a day, asserts that he never obtained annual averages of more than 26°,36 or 26°,87 what can, in no way, be compared to that temperature that two years ago we had occasion to feel in Buenos-Ayres, when the many eases of insolation caused the suspension of work in the streets, men and animals falling dead in the capital of the Argentine Republic.

In the summer of 1901, in New York in one single day died over 100 people, because of the high degree of temperature. Manaos, as well as Belem, capital of Para State, is another patient vietim of the terrific legends of the geographers who sit at their desks all the time, as insolation is unknown there. There is, to be sure, a summer season, and it is hot, but from that to the descriptions of certain boulevard informants there is a world of difference. Dr. L. Cruls is right when he says: « The Amazon elimate has been and is much injured. »

In Manaos after the many improvements that place has gone through, the malarial fevers are becoming more and more searce every day, and the few cases that appear are far milder. The same fact is observed in other small cities of that State. As to the rivers, nothing will affirm plainer their present sanitary conditions than the great number of rural establishments, the Storage houses, Stores, residences, which appear every day at the banks of the navigated rivers.

We will yet present the testimony of a man who has spent ten years in that region and who resides and has business there. He wrote to us, not long ago thus: « The rivers I know in my constant travels as the Tarauaeá, an affluent of the Juruá, (or Jururá, or Hyuruá) and the Envira, affluent of Turauaeá, as well as other smaller ones, affluents of the Juruá, enjoy a most healthy climate, and we notice there very few cases of malarial fevers and absolutely no cases of beri-beri. In the rivers Muru and Acuran, affluents of the Tarauaeá, and in the Jurupary, Diabinho and other affluents of the Envira, when there appear any cases of malarial fevers they are relatively mild and are easily cured.

Between the months of May and June and some years in July a metereological phenomenon takes place eausing a cool season very well known to those living in that region. It consists this phenomenon in a sudden fall of the temperature during three or four days in which the thermometre accuses depressions worthy of a European winter. But that is a passing thing, though sometimes repeated with persistence. Our friend Carlos Å. Noli assures us that one year when he had to experience, in the Envira river, the disagreeable repetition of the cold phenomenon, he suffered afterwards a rigorous summer and his thermometre reached to 36 degrees in the shade. But what are those 36 degrees compared with the infernal summers in Buenos Ayres and New York.

We must now publish a few of our notes, jotted down during our travels, on the life of the residents in the banks of those rivers.

Those who travel in the Amazon and its tributaries will find in

the banks, here and there, some buildings *sni generis* built facing the river, with their wooden bridges, and some small canoe, or *montaria* as they call it, alongside of it.

It is the barraca of the rubber manufacturer at the seringueiro of The building of the proprietors is all made of wood — and covered with pachinba leaves. The pachinba sometimes give trunks of 20 to 25 feet in length and these cut in boards of some 15 to 25 centimetres thickness also are used for the walls of those buildings. Many houses are covered with boards of the same pachinba, others are covered with zine, as there are very few tile factories and common tiles are sold at very high prices. In the upper Juruá, the cedar trees, so abundant in the neighboring woods substitute the palm trees for such uses. The houses and barracas of the seringueiros who are poor, are ordinarily covered with straw, most always furnished by palm tree leaves, but in preference by pachinba, urneury, jaey or jarina.

We have been rather long writing about the Juruá river and its affluents, because of its being one of the tributaries of the great basin, the one most noted our days, as the seat of an extraordinary productive power, attracting to it most energetically the seringueiros, the regatões (ambulant merchants going from place to place in small boats) the commis-voyageurs, and even the tame indians, who, once in a while, reappear to do business.

On the other hand, these details are good to document the progress realized in those regions. Twenty years ago there were hardly 10 houses in the Jurná river and the Tarauaeá, the most important of its affluents, whose course was then almost unknown. Even Barão de Marajó, whom I have referred to as the learned geographer of the Amazon, in 1896 wrote: «I can't say much about this river, because as it happens with so many others neither this one nor its tributaries have been properly studied, it has hardly been exploited by the rubber makers, and its botanical, zoological and mineral wealth has not been observed at all.

Nothing less than 30 nations, or Indian tribes, with more or less odd names, inhabited by that time the banks of the Hyapurá, and its affluents, but at the proportion that the enthusiastic mutum-mutum(4) invaded the solitude of those regions, spreading around the civilized

⁽¹⁾ Mutum-mutum is the word with which the Indians (half-civilized) designate the steamboat, alluding to the noise of the engines.

man, full of ambition, and thirsty for adventures, all those savage crowds run away hiding themselves in the far away corners of the forest where soon the invaders will surely go to trouble them.

Let us now see what these new landowners have done, and the manner in which, Juruá with its suite of small rivers, contributes towards the country wealth. Here is a table of the production in 1901, in the principal rivers exploited.

RIVERS	RUBBER « FINA »	RUBRER « SERNAMBY »	RUBBER « CAUCHO »	
	Kilogs.	Kilogs.	Kilogs.	
Lower Amazonas	 52.820,5	17.270	495	
Rio Branco	 4.443	885	_	
» Iça Brazileiro	 195,558	22.055	16.329	
» Juruá	 3.018.561	550.046, ⁵	2.624.278	
» Javary	 447.956	9.875	21.570	
» Jutahy	 22.142	5.654	214	
» Madeira	 1.616.091	294.285,5	241.025	
» Negro	 568.530	146.657,5	_	
» Purús	 4.128.274	624.551	556.060	
» Solimões	 1.525.075	518.058	160.999	
	11.177.248,5	2.073.127,5	5.600.968	

We have spoken about the Juruá, which is one of the newest fields of the rubber exploitation. We will now write about the oldest of them the Purus.

The exploitation of the Purus seringaes date away back, when the steamship service was introduced in the Amazonic bazin.

A Brazilian who was an enterprizing genius and whose name often appears in connection with the history of the Brazilian progress of the last 50 years, Barão de Mauá, was the initiator of the improved navigation in the king of rivers organizing a company under the name of « Companhia de Navegação do Amazonas ». The first steamers of this Company were ealled, Marajó, Rio Negro and Monarcha, and inaugurated their trips in 1852.

It was the Brazilian flag that won the glory of being the first to bring the steamship navigation to those waters, as well as the glory of having established a regular traffic from port to port. But, as soon as the river was open to the commerce of the whole world, the Danes were the ones to initiate international relations with the Amazon. It was in 1874, on the 25th, march, that a sailing ship unfurling the Danish flag reached Manáos from Hamburg. In his book « Il Paese delle Amazzoni » Sant' Anna Nery said: « The

impulse had been given; and on April the 30th following an English small steamer of 595 tons sailed from Liverpool and inaugurated the subsidied navigation, the promoter of that improvement having been Britto de Amorim, a Portuguese ».

The Amazonic colossal basin can easily be the rendez-vous place for the meeting of all the fleets of the whole world. It suffices to say that, according to Maury, it has an area of no less than 2.048.480 square miles. E. Reelus gives it a surface of 5.594.000 kilometres, and Bludan 2.722.000 miles. We know of no other fluvial basin that could be compared with this. « The Mississipi one wich is the largest after the Amazon has only 984.000 square miles. The other ones like the Plate, the Nile and the Ganges, are much inferior.

Some of the colossal rivers which are affluents of the Amazon, are little by little, being travelled by the northern pioneers — ambulant merchants and seringueiros — but they are almost unexplored as yet. The Purus was the first exploited.

The conquest history of this tributary of the Amazon, by itself one of the greatest streams of water of this planet, it is worth a hymn in honor of the enterprising capacity of the northern Brazilians. The Portuguese knew of its existence and some committees went through part of its course. Later on the English audacious and broad minded, paid it a visit and studied it. The Spanish descendant nations of the neighborhood also timidly navigated somewhat through it.

But, none of them did anything in the way of calling to the civilised communion the wealth of that region. It was only some time afterwards that Manoel Urbano, one of the most finished types of the Amazonic persistency and audacity, made frequent trips exploiting the rubber, the wealth of the forests at the river banks and then the active work of the natives of Ceará was trained to that wealthy and unexploited shores. Manoel Urbano at the head of natives of Pará, in large numbers, and later on at the head of natives of Ceará. penetrated the river in different directions in search of rubber, and in a short while there appear numberless barracões all along the river which were the beginning of the installation of small villages to-day transformed in beautiful cities, as Boa Vista, Arimary, Canutama, Berury, Labrea, and others. Three millions of tons of merchandise, predominating the rubber, descend each year, to Manaos, The autochtones tribe the hypurinas, the most powerful of the Purus, which were also in the Aere, the capechumas who lived in the interior, and the canamarys, so well known of the seringueiros, all of them were forced to hide themselves in the deep interior abandoning the Purus and its valleys.

This curious river, united to the Amazon by no less number of mouths than five, forming in its course hundreds of lakes, is exploited in all its course, the seringueiro has been in every inch of its banks. The ports at which the steamers call are many and multiply themselves, and eivilisation is going up penetrating in the affluents on both sides. The trip from Manaos to the Upper-Purus takes 60 days and over 50 steamers, all of them Brazilian, not counting the steamhaunches and small sailing boats, are sailing up and down



Manãos. - A part of Eduardo Ribeiro's Avenue

the river. This gives a good idea of the importance of the explorations that have been made.

What makes the Purus river more noted is its tributary — the Acre river.

It is untired civilising task the Cearense has for some years dominated the exploitation of these regions on the North-East of the Amazon, called Acre. This region was for a long time in dispute but was peacefully settled with Bolivia.

The question nearly brought about a war between Bolivia and Brazil, but thanks to the wisdom of Barão do Rio Branco's diplomacy and to the patriotism of the Brazilians the Acre makes part to-day of the territory of Brazil. The exit of this question owes much to Placido de Castro who, when Bolivia elaimed Acre as its territory, was at the head of the revolution on the Brazilian side, and Dr Sylverio Nery, governor of the Amazon.

We referred above to the Cearenses that emigrate from their native State to the Amazon region. And they do not form the whole of the total that immigrate into these two states Para and Amazon, many go from other northern states. Many thousands of passengers enter the port of Manaos yearly and the number is increasing all the time. In 1897 the number of them was 20.903, but in 1891 it went up to 48.931, more than the double, and nearly all Brazilians. That that immigration which is the rich seed of the Amazon grandeur, goes there to stick to its soil, work and flourish, it is proved by the figures that represent the acquisition of lands which have been published in official documents.

LANDS SOLD TO BRAZILIAN WORKMEN FROM 1896 TO 1900

Years			Area sold	Revenue for the state
1896			815.217,122	66:559\$255
1897			565.556,796	86:065\$967
1898				592:594\$607
1899			5.588.707,159	214:670\$689
1900			6.488,627,746	495:7168660

The data we print above has a good deal of meaning, demonstrate the energy with which the progress of that region is being elaborated.

Taking the number of entries in the principal port of the state, and deducting those who remain there, the remaining, which constitute the great majority, entered the interior conquering the wild forests, and consequently they will be ever so many contributors towards the transformation and its prosperity.

But we must show now, the number of foreigners and Brazilian travellers who remained in Manáos, in its 26 hotels, in the year 1891.

Brazilians	٠						5.960
Americans							51
Argentines							20
Arabians							7
Germans							41
Austrians							10
Belgians.					٠		20
		to k	riı	ıg c	ve	ľ.	6.089

	bro	ng	ht e	ove	r.			6.089
Bolivians .						٠		107
Colombians.								82
Frenchmen.							٠	298
Spaniards .								475
Hungarians.								2
Englishmen								57
Italians								595
Peruavians.								100
Portuguese								1.651
Russians .								165
Suisses								9
Dutchmen .								4
Uruguayans		٠		٠				10
			1	ota	ıl.			9,404

The large erowds of the newly arrived go at once to the interior and engage themselves in the promising task of extracting rubber from the trees. Seldom, very seldom, indeed, do they take with them their wives and children. What they most always have with them is the classic *viola* (a kind of guitar) which is the inseparable companion of the native of Brazil.

As we repeatedly have written, the natives of Ceará are the best and most numerous contributors for the populating of the Amazon and the progressive development of that region. The native of Ceará who leaves the Amazon does it only to come back a little later on. He repeats to-day with the same heroic tenacity, the role of the bandeirante from São Paulo in the history of the evolution of Brazil in the seventeenth and eighteenth centuries. The political-social phenomenon which took place in the south is now reproduced in the north. The scenery and the actors have been changed, but the nature but the human motion is the same, the history of each generation is nothing else but the reflex of the agitations of the preceding ones.

What explains sociologically speaking the predomination of the native of Ceará in the phenomenon of the migration of to-day is the famine of the constant and regular dry seasons to which is subject periodically a large portion of the State of Ceará, as well as of some neighboring states, consequently we have explained the moral physionomy characteristic of the new populating element, whose lines of melaneholy or hope transpire in their songs, in their activity at work, in their intimate customs and even in their vocabulary.

In the names they give to their seringaes searcely is there a name not suggesting a melancholic idea, or an aspiration of hope and improvement. In every nook of the river banks of those invaded regions, that note signifies the presence of the native of Ceará, or other northern Brazilian. The denominations Bomfim (good end), Boa Esperança (good hope), Livramento (delivrance (from evil), Nova Sorte (new lot), Boa Nova (good news), and others which denote confidence, good angury, or these others: Desengano (desillusion), Deixa Fallar (let them speak), Malquerença (bad wishes, to wish unsuccess to others), Sobral, Fortaleza (these two are names of Ceará eities), sad and allusive to the things left behind, which are repeated, so often, here and there, are the whole profound history of the soul of the native of Ceará, of the intelligent man, of the sufferer and the hero, and to whose irresistible andacity it is due the finding of the Amazonie hidden treasuries.

When he finds himself in the place he selected to start his life in tract of land hidden in the interior, — at the side of an *igarapé*, going to work on his account, or for some one already established — he takes charge of so many *estradas* (roads), as many as he can exploit: Each *estrada* has generally from 100 to 150 (seringueiras) rubber trees.

For mereantile purposes each estrada is worth more or less 400 or 500 milreis if the seringueiras are well preserved.

The Aviador, that is, the merchant in Manaos or Belem (capital of Pará) furnishes all the needed goods, material and food to the proprietor of the seringal. This one sells them again to the workingman, on credit, to be paid at the time of the harvest thus remaining tied up to the owner the newly arrived. It is easy to understand what efforts the patient workman has to employ to free himself economically, and in the metamorphose of workman to proprietor, reappear some day in Manaos, or in Belem, or in his native State rich and independent dazzling with his prodigality those he left in the misery of the old native village.

Those who depart are in much larger number than those who come back, to be sure. Yet, life there is monotonous quite even in their eares for the work of every day, year in and year out — apparently calm, filled with peace either in the hours he strikes the tree to gather his rubber, or at their hours of leisure spent at the door of the barraca listening to the songs, very long and very sad ones, that they are, accompanied by the melancholic and plaintive sounds of the sweet viola. His life companion puts the child to sleep singing some old song, after having given the little one a bath in the river and put on him his night shirt with strong perfume of the piripirioca (a scented plant abundant in the northern states).

* *

On a sunny Saturday, it was the 2nd July, 1902, when we were going through the Breves narrows (which, by the way, looked to me quite broad) we began to discover in the afternoon some mountains at the distance and at our right. On one of those mountains is the city of Monte Alegre, belonging to the Pará State.

Afterwards, a few leagues further ahead we saw the establishment



Manáos. - Court of law Palace - Principal front

known as the Cacaual Grande, a vast plantation of cocoa which, as they told ns, had just been acquired by a Paris chocolate factory. Then, on the other bank, we saw the city of Santarem, near the spot where the confluence of the Tapajos river with the sea-river takes place.

It is a beautiful scenery. The earthen dirty waters of the Amazon are filled with greenish spots which are confounded and transformed into a voluminous stream, ample and deep, which is the Tapajós

river, one of the most beautiful rivers of the world. Pacific and solemn, smooth and shining like an emerald, the Tapajos enters into the Amazon, without mixing with those of the colossal river its dark green waters, absolutely clear if placed in a glass.

Six hours from that time, at night, we were passing in front of Obidos, at the right going up the river. This modest city which will be soon fortified, as it is the key to that Amazonic maze, was deep asleep in the silence of the night, under the mystery of that land-scape deep with darkness, some lights, drawing the lines of the city, throw their shade in the water trembling and darkish.

The steamer goes straight on her way. When she reaches nearer any of the banks light-bugs follow the boat entering the cabins flying around the electric lamps.

Sunday morning, at three o'clock, we had in sight two cocoa plantations, which lend to the landscape a characteristic shade of green. This one of the many Amazonic treasuries is cultivated almost without any trouble spreads itself with exuberant ostentation showing the wealth of that soil. There are even some varieties that grow spontaneously without industrial work, as it happens with one known as the cacauarana, which is to be found in the wild woods. The aspects of the banks are, in a general way, identical, perhaps monotonous, specially after we see the first tracts, after one day's sailing in the narrows, and then there is only real enjoyment when the steamer gets very near the shore, as often does. Then we distinguish perfectly well the details: - that unending wall extended on either side of the boat, shows itself in a gigantie shape near us, spreading out towards the water thick and long branches of frondous trees, we see inflexible silvery white trunks brought forth amidst the thick foliage, and appear above opening the upper branches like an immense umbrella, some light red some green as if over them were passing two seasons of the year at the same time. The palmtrees are also seen elevating their high trunks above all the other vegetation, sometimes here and there isolated, sometimes in groups. Here, we see the assahy long and thin seeming ready to burst with the first blow of the wind, there, the tucumã with a solid trunk defying everything. We find in one place the skeleton of the bacury leafless and dry reddish as if it were an old rusted iron frame, in another place a group of trunks bundled at the basis as if they wanted mutually support each other, and tall, very tall, in perpendicular line as if avoiding a dreadful effort in the struggle for light, which they wanted to drink beyond, above the top of the strongest trees. And as life and death embrace each other every where, at every

great distance we see some dead tree fixed to the soil by brutish roots that can't be destroyed assuring its position for a century. Shades that they are of a majesty, those majestic remains resist half drowned in the steel net of *cipos* in a forest struggle, suspending from its naked arms a whole lot of parasites, gravatas, orehideas, and others.

In the ocean of eternal and renewing foliage which grows in those valleys, covering the stones, filling empty places, those solitary trophies have in their dominating and silent impassibility a noisy expression of an unfinished struggle, permanent and persistent, formidable struggle, struggle that goes beyond death. This is the scenery in which everything agitates and everything seems immoable, in which everything makes a noise and everything seems dumb, everything exists and everything seems dead, living, growing, blooming, dying, renovating, each tree, each stone, each insect, each germ engaged in the renovating struggle of the fratrieidal life, in which everything and everybody find itself on the ground without attempting,

....... sin saber quizá ni por qué la muerte dá, ni por qué pierde la vida.

(without knowing also, neither the reason why the death gives, nor why loses life.) as was said by the inspired poet Nunez de Arce.

At last, at 9 in the morning of the fourth August, we landed at Manáos.

* *

Manaos. — Those who have never been in Manaos and have their heads filled with all kinds of untruths published by a lot of foreign books written on Brazil, telling all about the impossibility of inhabiting the tropies, the backwards condition of these countries, etc., etc., will surely be much surprised men when they see for the first time the capital of the Amazon.

Nobody would imagine it in the condition it real is to-day, that modern city of Manáos. Why? Is it possible that after a 900 mile run through the heart of the South American deserts, with the most inaccessible and thick woods, there may exist a city like this one?

To be sure it is possible. And not only it really exists, but prospers and grows every day, and then it is evident that the people who build it up, who nourish it with the vigor of the large cities, have done, to be sure, something worthy of note, their has been an important one.

The capital of the Amazon, seen as a whole, has the physiognomy of a city just built.

To be true, it is a new city. It is built by an immense affluent of the Amazon, the Rio Negro, (Black river) thus called because of its dark color, something like coffee color, and no learned man as yet has been able to account for that explaining the cause. It is situated in an ample bay of the river, offering thus to the navigation a safe port. They are nearly finishing the great harbor works which will make of Manáos a landing place of first class.

As he enters the city, the traveller finds himself in a quite large square, treated with care, with a pretty garden, and its grounds somewhat inclined. In an angle at the other end of the square is the Cathedral, dominating the square, on an elevated ground which is levelled to take away the inclination of the square, there being stairway on both sides to enter from the lower part of the square. From there, beautiful streets run in front and at both sides, all of them lined with buildings of modern construction, the business houses displaying pretty show windows in which the products of the world's arts and industries are exhibited.

The area of the built part of the city grows larger every day, and as the topography of the place is somewhat inclined the inhabitants of Manaos, undertake daring works, opening great cuts, filling in tracts of ground, putting down hills, attending to the sanitary conditions of shallow places, while the private buildings keep on occupying the ground thus conquered. The new streets, wide and in straight line give an aspect of feast, a modern atmosphere to the new capital. Amongst other streets, the following struck us most favorably: Municipal street, 30 metres wide, built on a ground that before was marshy, is one of the most beautiful streets of the north lined with fine buildings; Jose Clemente Street, Remedios street, Quinze de Novembro Street and others, None of these however excells Eduardo Ribeiro Avenue which reminded us of the Majo Avenue of Buenos Ayres, though it has not the fine buildings the latter has, it is well paved, and profusely. In the afternoon and evening the high-life the wealthy part of the population walk up and down Eduardo Ribeiro Avenue. In the drinking places they drink their vermouth and comment upon the events of the day. The public buildings with their beauty and architecture prove the excellent installation, the progressive state of the city and newly born power of the Amazon metropolis. We will mention some of them.

For the new-comer, one of the things that attracts his attention the most is the magnificent theatre the «Amazonas», whose construc-

tion has just been finished. It is built on a causeway all of mason work, and its dome of light colors raises itself above the whole city. The external lines are majestic, and while not obeying to no special classic order of architecture is a happy conception, if though a little too able details. Inside this theatre is a beauty with all those rows of columns supporting the four floors of boxes yet they disturb somewhat the perspective of the whole.

The foyer has no equal in all Brazil, it is large, light, surrounded



Manáos. - S. Sebastião 's Square and the Amazonas Theatre.

by columns imitating rare marble and decorated with *De-Angelis* paintings of rare artistic value, as those that represent *Cecy e Pery*, *Um trecho da Selva Amazonica*, (A piece of Amazonic landscape), the *Sun-Set*, and others. Between the paintings there are marble busts of the celebrities of modern theatre. The electrical installation of the theatre, can serve as a standard, and is worthy of note, as a work of art, the large lustre which illuminates the audience hall.

The Palace of Justice, also lately inaugurated, is another orna-

ment of Manáos. It is Roman style, its stairway made of bronze and marble leads to the large halls where the judges have their offices and Court rooms. The parlour of the judge who performs the marriages could serve as a model for Rio de Janeiro, and is decorated with furniture of gothic style. The Jury room, the Supreme Court Hall are severe in style and imposing and are all in accordance with the external beauty of the building.

The Gymnasium has a lordly aspect. It was inaugurated in 1886



Manáos. -- The saloon of Amazonas Theatre

during the Administration of Dr. Ernesto Chaves, who was then the president of the province.

The building of « Instituto Benjamin Constant » which we visited in all its departments, is placed at the end of a beautiful garden. There they educate young girls and they are trained by Sisters of Charity.

The eathedral is a vast temple of simple architecture and modest interior, all white. The church is floored with lumber and has on both sides stone platforms, (Lisbon style mason work in high relief) wherefrom the sermons are preached. This church is under the saint name of Our Lady of the Conception.

One of the visits that left on us the best impression, was the one we paid to the police regiment barracks, a large building two stories high facing the Constituição Square. In the upper story are the fencing parlors, the Major-staff-room, the library, where we admired a beautiful painting « Libertação do Amazonas » (freedom of the Amazon), and in the lower floor are the spleeping rooms of the pri-



Manáos. — Benjamin Constant's Institute

vates companies, guns store rooms, and at the end the stables, filled with splendid River-Plate horses.

The Military regiment of Manãos is one of the best organisations of its kind in all Brazil. It is composed of two battalions of infantry, with 500 men each, and a detachment of 40 men cavalry. The infantry battalions are commanded by majors, who are officers of the regular army. Each battalion has a band of music not inferior to those of Rio de Janeiro.

We must also speak, among the nice buildings of Manáos, of the

public market, an elegant structure of iron and lumber by the river side. When this building was erceted, not many years ago, everybody thought its dimensions exaggerated and far beyond the necessities of Manaos. Now everybody complains that the market is altogether too small. The city grew much quicker than it was ever thought of.

The same thing happened about the Sandade cemetery. Some fifteen years ago the municipality designated that place for a grave-yard. There were claims from all over to the effect that it was too far, that there were no means of conveyance and many other protests. To-day the cemetery is surrounded by buildings, the city growing up in that direction and it will be soon necessary to remove it from there.

And as we have spoken about means of conveyance, we must say that to-day few eities in the North have so complete a system of tramways, except the City of São Paulo which has also a very good tramway system. There is also in Manaos a regular service of eabs and carriages. The São Paulo as well as the Manaos tramways are of American manufacture, large, comfortable, clean, and run through the city in all directions. The main line in São Paulo is called Avenida-circular, and surrounds the contornation of that beautiful city, going over a beautiful bridge which crosses a stream (as strong as some European rivers) which has escaped from the number that have been filled in to build up streets and houses.

No visitor comes away without often repeating that trip, as well as the one that goes to *Flores*, a district a little way off filled yet of thick and wild woods but threatened with the invasion of city buildings, lining with beautiful residences the road that is cutting the forest.

The bridge we referred to above is called Cachocira Grande, made of iron, divided into three sections, and is an excellent point of view to observe the magnificent surrounding panorama. Other bridges and viaduets, as the Remedios and the Cachocirinha, mounted on stone columns embellish other sections of Manaos.

In front of the Governor's palace, which is a modest building they have built a pretty garden named *Republic*, where charming moments can be spent.

One of the most noted things of the city is its splendid illumination second to none in the whole Brazil. The reader can have an idea of what that branch of public service is, knowing that 527 arclights, 2.000 candle power each, are lighted at a cost of 450 contos yearly.

This Electric light company furnishes also 1.800 sixteen candle

power lights to private houses which work since the company installation all over the city.

The pumping work of waters taken from the Cachocira Grande falls and placed in the reservoirs built specially for it in Moeö and Castelhana, is also made by electricity. The water is not as good as the Rio de Janeiro water but it is not much inferior and its distribution to the population is abundant. They furnish daily 6.000.000 litres and the State government spends annually with this branch of public service about 400 contos yearly.



Part of Rio Acre

By these simple notes we have printed here the reader can calculate the progress of the beautiful metropolis of the Rio Negro. But this is not everything. Any of the improvements and services of a large European city can be found in that city, which is in the most hidden corners of this continent between the base of the Andes and the corridors of largest mass of fluvial waters in the whole world. The telephone and telegraph (either the subfluvial or the overland one that the State built at its expense until the frontier of Pará), the newspapers, the libraries, an active commerce, everything indicates that civilisation installed in that region of the semi-cultivated continent a new land mark of its evolution.

With the colossal works that are being finished for the adaptation of its port to the requirements of the large international commerce of which Manaos is the centre in this part of America; it is impossible to foresee the impulse this metropolis will receive as it had been impossible 30 years ago to foresee the present development it has attained.

What Brazilians ean be more proud of, is, that all the progress is the work of themselves. Manáos is a product of Brazilian activity, faith and energy. It was disputed, conquered and enriched by Brazilian arms. To-day Manáos is a eosmopolitan city, as it is a centre of strong navigation and commerce, because the aliens look for it, come to it with their work, industry, deep ambition. But the roots are energetically national, the work that circulates through the interior rivers, which discovers the hidden corners of the desert, which explores the wealth with tenacity, which transports to the solitude of the internal spots the seed of ideas and sentiments, is all the work of the patient native of the North of Brazil, with his inconquered resistance, his strange customs, fine as gold, firm as steel. It is above all the work impelled by their trusting and ingenious soul, dreamy and strong, poetical and warlike that defies the storms of the Atlantie in a raft and penetrates the solitude of the interior without any other tools but his boat and a row.

The dominion of the world will be, eternally, in any sense, of those who dominate the waters.

Since Humboldt, many prophecies have been made as to the magnificent future which is reserved for the Amazonic region. Certainly, however, few of these prophets calculated that in the present generation the existence of a city like Manáos, right there at the month of Rio Negro should already be a reality.

This phenomenon would be impossible 50 years ago, when the Amazon was not dominated yet. At that time, it represented nothing else for civilisation but a stupendous geographical marvel. Referring to it used to be said: « it is the mightiest of rivers, » and everything had been said. The trips through its waters were enterprizes considered as dangerous as a voyage to the poles. From Pará to the Rio Negro and back it meant then ten to twelve months. Those who made that trip, in small sailing boats or little canoes with rows used to be received with sky-rockets on their coming back. When the steamer began to make these trips everything was changed.

The sea-river was conquered and with it Manáos, then a simple group of small houses, just a stopping and resting place in the Rio Negro. From that time on it gathered strength, and grew up suddenly.

After that the Purus river was conquered with several other affluents, and each victory against the savage nature of the continent, in those colossal roads, corresponded to a new impulse towards the progress of Manáos. The most recent of those victories was the dominion of the Jurua, with its tributaries, about which we wrote

above. Over 5.000 tons of merehandise goes yearly to the great capital augmenting its world commercial intercourse with the whole world. But, what does that represent in that infinite incognito world that is there defying man? Very little indeed.

What does that matter? The steamer is there now and the natives of Northern Brazil will do the rest. On its turn the native of Amazon is also in a hurry to complete his work of eivilisation.



Bank of Rio Punis-Landscape at the time of floods

The administration of the last few governors has been as good as could be wished for and the Amazon has now entered an era of activity and work aided by an honest government.

The governor of the State to-day, Dr. Constantino Nery is a brother of the last one who was Dr. Sylverio Nery, a perfect gentleman, a military engineer, a broad minded man, a learned man and animated by the most patriotic sentiments. He has re-established in the Amazon an honest programme, an orderly one in the administration affairs,

He made great improvements in the financial conditions of the State and gave quite an impulse to the commercial and industrial activity of Manáos. His government marked an era of noted progress for the State. It suffices to remember his wise and intelligent intervention contributing towards the realisation of the colossal harbor works of Manaos and towards the support of the Brazilians in the



Manáos. - « Amazonense » gymnasinm

Acre region during the disputes with Bolivia. On this subject it is not known yet how much Brazil owes to the attentive and discreet action of Dr. Sylverio Nery's politics, but in time it will be known so that justice may be done to his patriotism and intelligence.

The establishing of schools, the inauguration of several public establishments, the termination of political persecutions, the recovering of the financial credit of the State, in a word, the decisive cut in the practice of abuses, which seem to exist unfortunately in

previous administrations, are the titles that Dr. Sylverio has to impose himself to the gratitude of his State and the respect of all those who care for the welfare of the country, repudiating private interests.

He made quite a number of improvements and some of them of high importance. He inaugurated a Sanatorium in the most healthy spot of the State.

On the 9th. February, 1901, he installed officially a Laboratory of Analysis for analytical chemistry, bromotalogy and texicology. As an annex to this Laboratory there is a small bactereological arsenal, which is the beginning of the foundation of the respective laboratory.

Ile also installed in a new building the City Hospital which was not in very good conditions in the old building. He inaugurated also a *Model School* to serve as a kind of *normal college*, furnished with all the pedagogic material needed and prepared as well the establishment of an agricultural school in Paracatuba.

In 1903 there were in the State 167 Grammar schools, with a frequency of 5.911 students, but in this number is not included a large number of private schools.

In Manáos there are 45 schools all of them in fine buildings nicely appointed with adequated pedagogie furniture.

* *

One of the beauties of Manáos is its port alway's animated, always filled with boats, loading and unloading. We see there not only the small river boats, steam and electric launches, as the big transatlantic steamers which stand still pefectly motionless so calm are the waters. In front is the quay with its enormous lifting machinery ever busy loading and unloading the lighters that come alongside.

The constant movement of small boats, the whistles of the steamers and their echoing voices, the variety of colors of the flags unfurled in the masts, everything gives to the port of Manáos one of the happiest and most picturesque feature. As the city is built on ground slightly inclined, from many points of it we can enjoy the contemplation of the most beautiful panorama one could imagine, looking at the port and the active life that animates it from sun rise to sun set.

Formerly just in the place where Manáos is to-day, there were two tribes of indians — the Passes and the Manáos — the latter

having given the name to the city. Even as far back as 1839 a Brazilian writing on the primitive city, seat of the Rio Negro port and district gave some very curious informations. Among other things he wrote that there were 232 houses, with straw roofs, and even the governor's palace had a roof made of the same material, as well as the soldiers barracks and nearly all the other public buildings. There was a small ship yard to build lighters and canoes. There were a few private houses covered with earthen tiles, but they were very



Manáos. - Public School

few. The powder magazines were roofed with the same material. There were two churches: The Matriz, built by some Carmelitas missionaries in 1695 and another very small one of little importance. The population of the city was 347 men and 327 women (white), 415 men and 450 women (mamelucos) — (children of Europeans and negroes), 799 men and 1.042 women dark mulattoes, 225 men and 164 women slaves, 225 men and 206 women, (mongrels or mixed breed). The whole city had but 11 small streets and one square. That is just what Manáos was in 1839.

To-day this beautiful city has an area of 40 square kilometres and about 6.000 houses, in the majority two story high, villas, palaces, built on the ground where the extinct indian tribes were. The streets are long and wide, with trees and well paved, going from one end to the other of the city, tearing the space through hills and rivers and from neither one of these two there is not the slightest vestige, except the openings and the filled in places. The commerce opens each day new houses, displays in the avenues luxury and comfort. The industries begin to appear here and there making noise with the machinery of the factories and darkening the sky with the clouds of smoke from their chimneys. We had oceasion during our short stay in Manáos to visit factories of several products as ice, matches, electicity, incineration of the city garbage, parasols and umbellas, rubber goods and others, and we can affirm in the most convinced manner that we have great faith in the future possibilities of Manáos.

Yet, it is not only in the capital that the admirable luxury of that true *El-Dorado* — the Amazon, — is displayed. Neither is it there only that we can see that conquering work transforming and civilising of the Brazilian race. Besides Manáos there are 20 other cities and villages, by the banks of those enormous rivers of that State and they show how much activity the inhabitants of the northern States of Brazil have developed in that effort to perform the social work of civilisation in that region.

The principal ones are Barcellos, Borba, Bôa-Vista do Rio Branco, Humayatá, Labrea, all of them with an active commerce; Manicoré, a very progressive city founded in 1877, its budget being then about £ 30 and to-day is of over £ 20.000; Manés, Olivença, Antimary, Caquetá, Teffé, Villa Bella, Silves, Serpa, Rio Branco and others are so many marks of civilisation spread through the territory of this colossal State of the Amazon. We regret that the limited space of this book does not allow us to write about each one of these cities.

If we could do so how much couldn't we write about the municipal district of Rio Branco, for instance. But about this place we cannot avoid writing a few lines even if for nothing else but to dispel from our readers' minds the erroneous idea people have to suppose that in the Amazon State there is only the forest industry.

The valleys of Rio Branco intermingled with beautiful ridges of mountains until the frontier of Brazil with the English Guyana, are a magnificent field for cattle raising as well as for the cultivation of corn and wheat and we even go as far as stating they are probably better fitted for that than Rio Grande do Sul and Santa Catharina.

It is calculated in one thousand square leagues this beautiful region, proper for eattle raising and dairy industries and yet at a distance relatively short from the capital. Were it not for the Water falls of Rio Branco, the trip from Manáos to these valleys could be made in two days. A railway would resolve this problem, and notwithstanding the difficulties to be met in an enterprise of this kind, the local Government is thinking seriously of building one. As to eattle raising, a party competent to speak on the subject said that



Manáos. - Public School

cattle can be raised wild and the beef can compete with that of Rio Grande and River Plate. The only fault with the ox is not crossing with superior races and that can be easily remedied once that the Government should train immigration helping the cattle raisers. The inconvenient for the dairy industry is the excessive length of the farm lands. Only one of them, known as S. Marcos, occupies an area of dozens of square leagues and can contain if necessary one hundred thousand heads. Similar elements of greatness are found in other municipalities.

What we have written on Manáos is sufficient, we think for the reader to calculate the importance and progress of that vast tract of the Brazilian territory, to be sure one of the most prosperous federative entities of the Brazilian Republic.

THE STATE OF PARA

Of all the Northern States of Brazil, the State of Pará is the most important as to its population, wealth, external commerce, and the progressive condition of its capital, the city of Belem. Even



Belem. - Building of scholar's group on phe Baptista Campos place

comparing it with all the other states of the Union, its present value and growing progress assure for it a superior and glorious place in the Federation.

And yet, this is not one of the oldest states, neither did it dis-

pose of, to attain its present development, any of the governamental advantages other States had either in the times of the sovereign nationality or in the colonial ages.

Visited from time to time by English, Dutch, French and other adventurers, who never could establish there a firm settlement of conquest, it was only in 1616, nearly three centuries ago, that a Portuguese, the Commander Francisco Caldeira Castello Branco, was sent from Maranhão to found a city in Belem, the first foundations of which were placed in the ground in January of that year, as the chroniclers of that time assure us.

We must count from that date the initiation of the national existence of this great Northern State.

Until 1640, however, Pará had no political personality, it was a part of the Maranhão government, but from that date on it was constituted a political district, perfectly aside, having concurred to that result not only the fact of the Dutch invasion in the Maranhão province, as well as the degree of material importance to which Belem had reached, and that can be ascertained by the document of that time.

Later on it was incorporated to the Maranhão government, but it got independent by the end of the seventeenth century, though with great struggle, considered as a province then and to-day a State under the new form of Government — a republic. —

The great advancement of this Brazilian region, in the way of progress, became more evident, however, just as it happened with the Amazon, with the development of the making and exporting of rubber. So that if we look for a point of historical reference, to fix in a plain way, the initiation of that trajectory, just as it happens with the Amazon, we will have to adopt the date of July 31st., 1867, the happy date of the opening of the Amazon river to the international navigation, as the progress and prosperity starting point of the State of Amazon.

The rapid progress of that region from that time till to-day can be seen by the increase of its revenue. What Pará was then, and what it is to-day can be seen by these figures:

Progress of the revenue of the State of Pará every five years.

Y	ear	g .		Average in the five year					
1867	a	1868			274:4278608				
1872	a	1875			578:605\$507				
1877	a	1878			785:970\$765				
1882	a	1885			2.502:424\$774				
1886	a	1887			2.715:686\$081				
1892	a	1895			6.000:000\$000				
1897	a	1898			9.702:251\$181				

This progress does not represent an increase in the taxes, but simply the increase of production, exported from the State. It is well known that the main importance of revenue is obtained by the exportation taxes.

The following table will show that the importation of Enropean and American industrial products kept pace with the exportation progress:

IMPORTATION IN THE PORT OF BELEM.

Y	a			Value of the importation							
1894	a	95			8.506:568\$000						
1895	a	96			9.601:887\$000						
1896	a	97			13.975;815\$000						
1897	a	98			18,366:450\$000						
1898	a	99			21.502:7348000						

It is worth while, since we are dealing with figures, to register also the total revenue of the state in the laste decades:

REVENUE OF THE STATE OF PARA IN THE LAST DECADES.

Years				Official value
1851				2.291:953\$955
1861		••		5.660:147\$471
1871	٠		٠	11.796:407\$310
1881				16.907.491\$146
1891				21.235:730\$696
1901				30.938:830\$000

As that revenue, as we have said, comes mainly from the exportation of the products of the State, it is natural that we should show the reader the figures of that exportation, and so much so because they prove a progressive scale as seldom as been seen any where else. We will see then:

EXPORTATION OF PRODUCTS EXCLUSIVELY FROM PARA, EXPORTED BY THE PORT OF BELEM.

Yeara					Value of exportation
1838					848:577\$869
1840					1.236:857\$039
1851		٠		٠	1.986:542\$175
1861					3.567:058\$775
1871					9.348:295\$890
1881				٠	15.701:072\$700
1891					27.755:667\$004
1901					96.052:397\$000

Just as it happens in the neighboring state the main factor of progress, worthy of note, is the rubber which Pará has in endless quantities in the banks of those mighty rivers.

The large amounts of capital and the large number of workingmen employed in the extraction of that source of wealth grow larger day by day.

To be sure, that constitutes a disagreeable contingency to fix the financial situation of the State, because any alteration in the value of that merchandise, in the buying markets, will make its effects in the disturbing oscillations of the official revenue, robbing from the budget its necessary character of prevision and method.

Let us see what happened several years ago 1896 and 1897 when the depression in the rubber prices caused a violent and uncomfortable condition of the whole economical and commercial life of Pará.....

The State however is exporting other products, as eoeoa, which is largely produced in its territory, there being two harvests yearly, chestnuts (Brazilian chestnuts), tobacco, oils, rosin, etc.

No other State of Brazil, excepting the Federal capital, shows such a maritime activity as Pará does. Its geographical situation justifies that fact. It has, with the port of Belem, the key to the vast north. There is the natural meeting of everything that is coming down, — men and goods — from the beginning of those great rivers already exploited and those to be exploited, so that, each one at its historical moment, will come to increase the relations of the Belem Emporium. Not long ago, we heard a traveller expound the strange thesis that the civilisation of Brazilian northern cities is being dislocated from Maranhão towards Belem and thence to Manáos, so that each point of the scale of that march will come back to ruin successively, at the proportion its neighbor will grow larger and richer.

Only those who look to phenomena of that kind superficially can admit such a conjecture.

Belem. — Eight days stay at this capital of the Pará State will suffice to teach enough to the visitor to enable him to see these subjects in a better light.

Let us open a map of the State, and we will immediately see that the providential position of Belem, in the place it was built, secures for it every possibility and probability of a future similar to that of the great historical metropolis. Belem is already to-day a powerful city, growing rapidly, strongly and so far it has only serving it as organs of appropriation and nourishment a very, very small part of its rivers, of its islands, relatively, compared with what can be placed in the field of exploitation in the future.

Quite often when we went through that capital, quite contented

looking at its active commercial movement, at its port filled with masts of ships and smoke-stacks of steamers we asked ourselves: What a capital will this one be when the continent island — Marajó — and the other small islands, the small and large rivers, everything



Belem. - Modern Guban Buildings

in full bloom of exploitation, populated and navigated, shall empty itself here, with those unknown fabulous treasuries, which are reserved for its opulence!

It is silly to imagine that the developement of Manáos will shake in the least the greatness of Belem. The former has its economical role as the key to the regions it encloses, in that height of the Amazon. But Pará will always be the natural outlet of everything existing between the Tocantins, Xingu, Tapajoz and the other rivers, not to speak of the larger rivers. This on one hand, and on the other, all that big number of islands, rivers and lakes, that are spread towards the North and Northeast, belonging to the lower Amazon system. All of this large world relatively unexplored, which could contain 300.000.000 people, and feed the whole of Europe, has and will always have as its natural head the city of Belem, which will keep on growing at the proportion civilisation and industry will dominate those vast and mostly deserted fields.

We can already place Belem at the side of the large cities of this South American continent. According to the census of 1902 it has 120,000 inhabitants, and the statistic data of the competent department published in a report written by the ex-governor, Dr. Paes de Carvalho, gave the number of inhabitants as nearly 92,000 in 1896.

POPULATION OF THE CITY OF BELEM.

Years					lnhabita nts
1720					4.000
1820					9.000
1852	٠				12.467
1850					49.980
1882	٠				60.122
1896	٠				91.995

Yet, here it is the manner in which a well known historian described that eity in 1700: «nobly built up and having sumptuous churches: Matriz and Miscricordia, the large temples of the Nossa Scuhora do Carmo, Mereês, Redempção de Captivos, Religiosos da Companhia, Capuchos de Santo Antonio, and Capella de Santo Christo convents; barracks, beautiful residences, the fortress of Nossa Schlora das Mercês, and the mouth of the bar, upon the river, with many pieces of good artillery of great calibre, of iron and bronze. » Churches and fortresses, monks and soldiers.... how far away that age is!

But let us leave the ancient Belem, the reader will feel more interested reading about the Belem of to-day.

We had already stopped a very short while, on our way up, at that eity, but it was in August 1901 that we went there with the intention of stopping there to examine it and get acquainted with it.

Those who go from the South, curving the point where the Surnpy light-house is, enters in the Pará route, goes through a majestic river of silvery waters, vast as the sea, tranquil and filled with pie-

turesque and green islands. At right and left, once we pass Salinas eity, where they have placed a light-house-boat those islands are in large number until we reach in front of Belem.

It is beautiful the aspect of the port!.... The city can't very well be seen from the outside, as it was built in a region of plain and low grounds very little above the level of the sea.

This eircumstance is in favor of the port, which presents itself, to the examination of the new comer before the city does it.



Belem. - Statue of the bishop frei Caetano Brandão

It is a forest of masts and smoke-stacks, steamers and boats of all shapes, large and small, black, gray, white or green, the majority of them with the Brazilian flag, anchored motionless by the eity, and others alongside the docks and bridges. Among them we can see by their color the many steamers of the Companhia Amazonas, painted of light yellow, an original color which contrasts strikingly with the dark green of the waters.

The movement, the noise of the whistles and lifting machinery, the running of the steamers arriving and sailing, all this gives to the port of Belem a characteristic aspect. The port is a tranquil lagoon, formed by the Pará river, which is jotted down in the maps with the name Guajarà bay. It is lined by thick woods which at distance appear as a grayish green band.

At the side, in the continent, is the city, an extensive one, as ample as Madrid or Lisbon, plain and levelled with the neighboring woods, appearing only with more prominence the towers of the eathedral or the roof of some one or other building a little higher.

When we land we have a beautiful impression. The quay, where



Belem. - Frei Caetano Brandão's Square

are by the water side, the market, the Custom House, the doeks and storage houses of the Brazilian Lloyd and Amazon steamship companies, is lined by a magnificent boulevard, paved with stone blocks, and the commercial activity to be seen in that river side part of the city is wonderful. The Quinze de Novembro and João Alfredo streets which run parallel to the quay, are thick commercial arteries, with banking houses, luxurious stores, large three and four story buildings, in general structures of simple architecture, altogether Portuguese style, but yet a few of them of modern style.

The most beautiful avenues are, however, in that part of the city most recently built, and the buildings in them are of more artistic taste. They are all the work of the last twelve years.

If the visitor takes a tramway ride in the ears that go to the distant suburbs as: Umarisal, S. Braz, Baptista Campos, Nazareth, Marco da Legua, he can then appreciate the extension of the city.

The most central city districts are, just as in Rio or in São Paulo occupied by the stores and commercial storage honses. There the streets are narrower, although straight and clean, quite clean. Even in this business quarter, constantly modified by the progress of the city there are squares which have no equal in all the other northern cities and we might say in all Brazil.



The Square Frei Caetano Brandão, which some find quite sad, we found it poetical. It is one of the first to be visited when we arrive at Belem, attracted by the cathedral that is on it.

There is in the centre of the garden of the square a monument with square basis, of white marble, with the bronze statue of the Bishop D. Frei Caetano Brandão after whom the square was named. The bishop is with clerical robes and his face is full of expression. He must have had just that venerable type, the good prelate, who so much loved that city, that he built the first hospital there for the poor.

Let us have a look at the cathedral. It is a large, vast construction, heavy and grave, just in the style of the Portuguese buildings of the eighteenth century when the tired style of D. Manoel time, had already disappeared from the mind of the architects. The front of the church is imposing with the severity of its lines and parsimony of its ornamental curves. It is composed of an ample face, the trunk of the building open with three main windows which let the light in, at the upper part, and some smaller ones for ventilation purposes as well as the light. They are disposed, however, without any regard to the harmony of the external expression of the building. In the centre upper part has what in church architecture the Portuguese call *crujeiro* with two small decorative pyramides and to finish two towers, one on each side, somewhat elegant, and everything is quite harmonious, the height of *crujeiro* and towers being pretty nearly the same.

In the interior the eathedral was treated with great care and we see that it was a church built in the good times of religious faith. It was built in 1771.

The painter, the high relief earver, etc, they all disputed the first place and as a result the interior work is of a most brilliant effect. There is perhaps a little exaggeration in the coloring. The main altar is all of marble, the platforms for the preaching of sermons are of bronze, nicely burilated, the great organ, the gas fixtures, the paintings in the ceilings and walls of great artistic value, everything contributes to the beautiful effect of the whole. There are ten altars on both sides and two are of marble, with the images of Jesus' Heart and Mary's Heart. The sanctuary is one of the most important ones in Brazil.

On the other side of the square is a large two story building which used to be the War Arsenal and to-day is an hospital. Next to it is another hospital called *Bom Jesus dos Pobres* (Good Jesus of the Poor) which was founded in 1787 by the good monk Frei Caetano Brandão.

On the bay side closing the square we see a grim wall which has the damp appearance of old ruins. It is in fact a ruin preserved respectfully for its historical value.

They call it the "Castello" (Castle). It was from there that the defense was made. It was there from the very foundation of the city, saw its birth, protected it in its days of weakness and now sleeps at the shade of its victorious progress.

The bishop's palace, a large mansion, three stories high, with windows all over and connected with the left side of the Santo Alexandre's church, occupies the opposite angle of the square, concurring thus to that strong impression of the whole.

We will now write about another important square of this capital of the Pará State — the Praça da Independencia. —

Belem, just as all the other South American capitals has one—Praça da Independencia. It is one of the most beautiful in Pará which is equivalent to say one of the most beautiful in Brazil, as in no other capital of Brazil we find more care and love for the city gardens than in Belem. The inhabitants of Belem, judging by what we observed, love nature, love flowers. There the parks and public gardens are not enclosed, we do not see those heavy railings as we see in many cities. Everything is open in Pará, the green lawns, the



Belem. - Monument to General Gurjão, on the Independencia place

beautiful gardens are quite open, there are no railings around them and nobody ever steps on the grassy lawn, nobody cuts a flower.

There is the reason why Belem can keep in perfect order the prettiest gardens in all Brazil.

The garden at the Praça da Independencia is worthy of note. It is divided in different sections, some kept as lawns, some as flower beds and some with short and delicate bushes intermingled with flower trees. The garden streets are well paved and there are benches for the public to sit down. In the centre surrounded by a circle

of real palm trees there is a monument érected in honor of General Gurjão.

In our excursions through Brazilian cities we have noticed that the majority of the monuments have been erected in honor of military men.

There are Generals in bronze and marble, a little of it everywhere, but Carlos Gomes the great late musician, with a single piece of music made Brazil better known of the whole world than all of those great warriors put together. So did Cayru, who led Brazilians by his hand to the advanced state in which they are to-day, by the opening of the Brazilian ports to the universal commerce; Mana, the introducer of the locomotive in Brazil; Gusmão, the inventor of the air ship; the late princess daughter of the Emperor Pedro II who put an end to slavery in Brazil by the simple signing of her name to a decree; and like these many other personages tied to the national civilisation by celebrated deeds and they are forgotten by the public, and they have not even a line engraved in the base of the statues of the lucky soldiers that are in the public squares. That is not just.....

Our remarks, however, do not embrace Parà, because if they erected that superb statue to the soldier who so richly deserved it and who died in a fight against the invading enemy, exclaiming: « See how a Brazilian general dies! », they did not forget the other meritorious citizens, and they built statues in honor of Caetano Brandão, Sama Malcher and others.

But speaking again of the monument of the praça Independencia we must say that it is of marble. In the basis are a few steps with lions, one on each side. Upon this there is a square trunk with a statue on each corner, then there is a cover with inscriptions and on top General Gurjão 's bronze statue.

Under the esthetic point of view the monument is far from being reputed a work of art, it lacks unity of conception, yet it is much decorative and it harmonises well with the square that needed a monument like that one high and of imposing appearance.

The praça Independencia is much frequented, not only because it is a central place but because of the buildings that surround it. These are:

The Government palace, a noble mansion two stories high and with an extra one in the centre body of the building, with a triangular front, 15 windons on each story, of simple architecture, its interior decorated with taste, and with a beautiful and broad stairway entrance of Lisbon stone. It is divided in two big halls where

the secretaries of the State have their departments. There is also an important bromatology laboratory, excellent creation of President Augusto Montenegro.

The building is well preserved, in spite of having been built in 1776 and has telephone, telegraph and electric light installations.

Near it is the City Hall built in the Colonial times by order of the Marquis de Pombal. This building is also two stories high, painted of blue on the outside, and very well decorated on the inside. In the Main Hall richly appointed is a beautiful painting representing the death of Carlos Gomes the immortal musician to whom Para soothed his last moments. In the same building is provisorily installed the local Legislative Assembly. The municipality of Belem is a



Belem. - Palace of the State's Governor

model of honest elever and advanced administration. The present Mayor, Senator Antonio Lemos, a true gentleman in his manners, is a wise and honest administrator, a man of an enterprising mind and a practical man.

Belem owes him a good deal and his contribution towards the progress and transformation of the city doesn't admit of any doubt. As the Mayor of the city he has been wise in the two needed characteristics: he knows how to promote revenue, and knows how to apply it.

Another central square beautifully decorated is the one named Visconde de Rio Branco, formerly known as Mercès. It is a little

smaller than the others, but it is very well taken care of, and like the others has no railing. The monument in the centre of this square is probably the most artistic of the whole city. It is simple in its composition, is not very original, but harmonious and suggestive. Standing upon a marble basis of square form is the bronze statue of the great Brazilian patriot José da Garna Malcher in a noble but natural position. In the principal face of the basis is the beautiful figure of a young girl with her knee upon the step in the position of one engraving the name of the hero. The monument is surrounded by an elegant railing.

The new square that the present Mayor ordered to be fixed with



Belem. - Building of the Paco Municipal

trees and a garden is the one named Baptista Campos, and is one of the beauties of the modern part of the city.

It was an enormous field quite abandoned in one of the eity corners where the grass grew with a vigor worthy of tropical fame. This was not long ago. The mayor Antonio Lemos transformed it in a little paradise, with fountains, little lakes with miniature islands, bridges, lawns, flower beds, fancy bushes and rare plants, well paved streets, a perfect paradise. Well invested the money spent in that public improvement.

In the other end of Belem, beyond the line of city buildings, the good taste, or we would say better the common sense, of those in power, idealized a public recreation unique in its kind in all Brazil what confirms what we have said before, when we affirmed that the people of Parà were the best lovers of nature among all others who live in the large cities of Brazil.

That public place is a tract of primitive forest bright in its vigorous structure of secular trees spreading their long branches with shady foliage.

The city grew up devouring the woods around that preceded it, that were squeezing it. Later it grew more, annihilated to spread itself, but reached the place called Marco da Legua; and finding that square of powerful tranks in rows tight together in a sombre way, as the last witnesses of a cataclysm, its destructive expansion stopped, admired and respected the mystery. Wanted to



Belem. - A part of the Municipal Park

spare it. Spread its avenues by its margin, it went on growing, but closed that piece of wild woods that was there at the very beginning of the city; encircled its four sizes with railing, opened streets to disclose the intense poetry of its bosom; placed green houses, booths, caseades, fountains, all kinds of artistic embellishments here and there. Spread through its thick foliage many drops of white light from are lamps. And then they named it « o Bosque » and thus « The Woods » has the right to live for many years, who knows!

This marvellous piece of Amazonic woods, preserved with filial love by the municipality of Belem, before the victorious expansion of its constructions, is a motive of pride for its inhabitants and of praise to the wise and honest mayor, Senator A. Lemos, from all the strangers who go there.

The same we might say about the rigor with which the precepts of good taste and hygiene are respected there, with regard to the arborisation not only of the avenues, but the streets as well. Among those we can cite *Dezescis de Novembro*, *Bragança*, *S. Jeronymo*, *Independencia* and others.

The ancient S. José Street, to-day Dezeseis de Novembro avenue, quite long and straight, has two rows of imperial palm trees which give it a graceful aspect, and remind us of the Paysandu in Rio de Janeiro.



Belem. — Independencia Avenue

Longer yet than the Avenue Dezeseis de Novembro are the beautiful Avenues denominated Bragança and Independencia; the latter is 40 metres wide, with three side-walks between two rows of mangereira trees, and electric light lamp posts in the centre. It costs a good deal of money to the municipality, but it is well worth the money spent. The former follows that one after a slight curve, and prolongs itself until the Bosque in the same proportions of the other though it has not as yet been paved. Beautiful villas and summer residences line both sides of this avenue which have also, like the other, two rows of trees. All these improvements are the result of senator A. Lemos' efforts and he deserves all credit for the many improvements and changes the city has undergone.

There are other squares we did not write about, some with gardens, others being fixed now, all of them illuminated with electric lights. We remember the names of these: Floriano Peixoto, crossed by Bragança avenue, the Saldanha Marinho and Trindade in front of the church of the same name, embellished with high palm trees, the Justo Chermont, where the church of Our Lady of Nazareth is and which is one of the nicest of the city.

The heart of Belem, its very first square, however, is the one where the « Paz » theatre is situated, in the most elevated part of the eity. Formerly its name was Largo da Polvora, because it existed there, in olden times, a powder storage house. Now with the



Belem. - Republic Monument, on the Republic Square

adoption of the new form of Government wanted also to have a Praça da Republica (Republic Square) just as nearly every eity in Brazil has and the historical Largo da Polvora was once more christened. But the change was not only in the name, it also greatly improved its appearance.

They made a large garden, which can serve a standard for others in Brazil. There are powerful electric lamps. All visitors must not leave Belem without going to this garden. We would like to add that it is treated with all care and is extremely clean. In the centre there is a beautiful marble monument, with bronze figures, to commemorate the proclamation of the Republic, and in the streets running diagonally with wide sidewalks with benches, there are always to be seen large crowds of people and carriages moving in all directions. They are going to the aristocratic districts, wide and well paved avenues illuminated by electric lights and adorned with pretty trees.

The main street of the square is filled with coffee houses, drinking saloons, concert halls and all kinds of places of amusements. The café « Paz », under the hotel of the same name, a beautiful building, is always filled with people not only inside, but also sitting at the tables placed on the sidewalk in front of the hotel. It is particularly so in the evening, when the scene animated by the music of orchestras in the places of amusements, the noisy voices of the newsboys and the movement of passers-by. The life in the evening always earnest in cosmopolitan cities, finds there its field of action and a most animated one it is. We can hear the sweet sounds of music mingled with the noise of the carriages passing by, the monotonous wheeling of the tramways always filled with people and if there is any theatrical company in town there is the display of the high-life, ladies richly dressed, the multitude of the wealthy in luxurious apparel, expensive overcoats and cloaks, because in certain seasons, the evenings in Belem are not less cold than in Rio de Janeiro. The cafés we speak of above are establishments quite different from those of Rio, they are a kind of combination of Candy stores and bar rooms. There are also in the square the Apollo circus and the carroussel Paz - the classic merry-go-round and many other places of amusements, where people gather always gay lending to that district of Belem a peculiar feature. Among the flowery and artistic bushes of the garden in the square is a beautiful fountain of bronze, making pendant with the monument of the Republic, which we referred to above.

This one is composed of an elevated column of white marble over an ample basis on the sides of which there are colossal allegoric figures in bronze, and on the top of the column there is the stately figure of a woman symbolizing the Brazilian republic. There are several steps at the basis, surrounded by a pretty railing, also of bronze. The avenues Indio de Brazil, Nazareth, S. Jeronymo and Republica, which start from the centre in the direction of the four cardinal points of the city are profusely illuminated, with broad sidewalks, and tramways running back and forth all day and night. The buildings lining these avenues are pretty ones, though here and

there can be seen several structures maintaining the Portuguese heavy style of architecture, because the Portuguese colony in Belem is quite a large one. We insist in praising the illumination of these avenues even because we can't say as much of the streets in the commercial part of the city which is most unsufficient.

We must not finish the description of Republica Square without referring to the building which completes the perspective, and which in its kind is one of the best in Latin America. We speak of the Paz theatre, a large structure of white marble, dominating the



Belem. — « Da Paz » Theatre (after its restoration).

gardens both at the front and back, appears to the visitor as an evocation of the Greek architecture of classic times.

It has more or less a parallelogram, elevated on columns of corynthian style, fine, even majestic, of fine lioz stone, with a triangular front, imposing through its simplicity. It has no needless details, no over ornamentation. The impression is gathered from the austere and harmonious whole which has an expression of tranquil grandeur and cannot be found in any other theatre in South America.

It was built during the reign of the second emperor of Brazil. It belongs to the State Government, who lets it to national and foreign companies, taking care of it and improving it all the time. It does not lose value as to architeture in its interior. It has four rows of boxes, held on steel supports artistically decorated. The plafond holds suspended from its centre a beautiful electric light lustre and is decorated with valuable and artistic paintings, painted by the famous artist De Angelis, and is exquisitely surrounded by high relief golden carvings. It is a theatre that honors the culture and importance of the city.

The same can be said of the *foyer* with beautiful inlaid floor, artistic paintings and well appointed furniture. Besides, it has a complete installation of electric lights, with machinery of its own, and all other improvements of a modern theatre, as really there is none in Rio de Janeiro.

A Portuguese writer of repute visiting this square two years ago, said : « The Largo da Polvora shames our Avenida da Liberdade in Lisbon. It has three times its width, it has nothing of that forced and uneasy appearance of that double row of simple houses of which the inhabitants of Lisbon become so proud, it has an immense statue of the Republica in the centre, well made, loosening from its bronze animated eries of victory and it almost can't be distinguished from the faces of the square. If they could place there the Triumpho Arch it would rivalize with the Champs Elysées. Through the street on the right, tramways, carriages and bieyeles cross themselves with horseback riders and pedestrians in an animated confusion. On the asphalt of the broad sidewalks drinking places, brasseries, serve their customers in small zine tables on the sidewalk. They drink, speak, laugh, with joy and with life. The Universal Club with its windows wide open displays its hall and reading room, where the profuse electric light throws its rays upon the luxurious furniture and beautiful paintings. At the end of the entrance hall we guess a dining room by the snow-white eovers on the small square tables, awaiting the members of the club who once in a while enjoy a tête-à-tête with their friends. And at the low verandahs the graceful heads of Para's fair sex seem to wrap in their jet black hair a whole wave of smoke. Human voices, noises of striking balls at the billiard tables, denounce the billiard room. Then further down in front of the central rond-point is the majestic Paz theatre, dominating the space with its circular line of terraces and rails. Once in a while a concert, an Italian opera company, a rare comie opera company makes the Paz theatre abandon its monumental serenity. »

There is no exaggeration in the coloring and animation of this description made by this writer in the above lines. We, ourselves, who have visited a respectable number of cities in Brazil and abvoad experimented that strong impression of admiration and pleasure, when for the first time we were on one of those boulevards that, passing by the large square, show us the splendour of its unequalled perspective. It was in the evening of the 15th. August, 1902, and as this date is celebrated in Pará, (for the reason of its integration to the Brazilian fatherland), there was special aspect of rejoicement and movement, which overflowed from the park and invaded the avenues in conjunction with that multitude of carriages and pedestrians coming from them to the centre. The superb theatre was open, and through the thick foliage of the trees,

over its decorations, its monumental greek columns whitened by the arc lights, we could feel the poetical inspiration as springing forth from an ancient and noble sight.

An act of justice, in spirit of fairness, compels us to repeat our praises, making known to the public, the name of that Brazilian who has contributed the most towards the greatness and embellishment of the capital of Pará, sparing no efforts, sacrificing everything, popularity, personal interests and sometimes even his health, in his ambition to Europeanize the beautiful city of Belem. This name



Belem. - The Cemetery

is Antonio Lemos and its owner is popularly known as Senator Lemos. He is the mayor of the city to-day and its inhabitants owe him all the great recent improvements, its modernisation, its superiority, and he is well worthy of having his statue in one of the public squares. For many years Senator Lemos has mortgaged his activity to Para. Everybody recognizes and proclaims the services he has rendered to the city his patriotic collaboration, but in our opinion as a visitor of the city, we believe, nothing equals this great task he took on his shoulders, for some years past, and is realizing

with tenacity, making the transfiguration of the old Belem city into this powerful and modern metropolis, which is becoming in all its features, appearance and habits, quite European.

From the theatre to the church, the least it may seem, there is not a great distance. We want then, to write about some of the churches since we have written about the theatre.

In a small square where a beautiful garden has been arranged and where cabs and carriages for public hire are always to be seen, there is one of the city churches. It is the Sant' Anna church, much frequented by the people because of its position in the centre of the city. It was built in the eighteenth century, we believe in 1761. It is simple in its exterior as it is inside. What we find worthy of notice



Belem. - The church of Our Lady of the Carmo

is that in spite of having been built in olden times, it is not in the heavy style of those times. Its front, quite simple, of straight lines, its two square towers, its modest dome, covered with glass to let the light in the interior of the church, are traits worth mentioning. In the interior besides the main altar, there are two others at the sides and in the choir is a good organ.

Another church is the one of Our Lady of the Carmo, of colonial times. It is of old style with a slight idea of Itatian art. It has a curious stone front finished in 1766. It has a wing building on the right, facing the square, and which formerly was the convent of that congregation, belonging to the founders of the church.

In the square, a large one, called Justo Chermont, is another church much spoken of in Pará. It is the one of Our Lady of Nazareth, were yearly they hold a traditional feast that lasts several days, in which the entire population of the city take part, with great joy and enthusiasm. The church was built recently, 1802, and has been enlarged in successive reforms, because the municipal authorities, taking in great consideration the popular catholic sentiments of the inhabitants, surround of all eare that church. It is quite curious to look at a department of the church where the sea-men for many years past come to bring presents offered to Our Lady of Nazareth in moments of danger. These are wax miniatures of boats and other objects of maritime life. That large collection of offerings, which, unfortunately, is being destroyed to make room for the new offerings that are arriving every day, forms an instructive and curious museum of nautical art, which, if collected by an intelligent amateur, would afford later on valuable information for the reconstruction of the history of Brazilian activity in maritime customs, in that part of the country.

We could write yet about other churches all of them with historical value, as the one of Trindade, recently rebuilt, the S. João Baptista one, the Santo Alexandre, and others, but we have other important subjects to deal with.

Public Instruction. — We will start this department by accompanying our reader to the celebrated museum of natural history and ethnography, named Museu Goeldi, a richly deserved homage on the part of the State Government to the name of a learned Swiss scientist who for many years is the director of that well known scientific institution.

That homage serves at the same time to enoble the wise scientist and to prove the highly cultured spirit of justice of the Brazilians of the North, who thus show that they know how to recognize the merit of any one irrespective of nationality or any other condition.

The Goeldi Museum is one of the most noted of Latin America. It has natural history collections elassified with all the rigor, a rich anthropology and ethnographic department, preserved with all care, and in the zoological section, a really curious one, they exhibit live specimens, mainly of the Amazon, in cages, and the public are admitted free to see that exhibition twice a week. There is an horticultural-botanic department annexed to the museum, worthy of being visited for the careful selection and organisation of

the catalogue of the great variety of phytological specimens there planted both in the open air and hot houses.

The publications of the museum are disputed by the studious elass of the country and abroad, thanks to the abundance of information of investigation and studies that they contain.

The public library of the State is one of the best organised in the country. It was founded on the 25th. February, 1871, by Dr. J. P. Machado Portella.

The State governor Dr. August Montenegro in 1901 annexed to that public department, the public archives, and to-day under the direction of Arthur Vianna, a patient investigator and bibliographer, native of Pará, the two departments are in the same building. We visited it in August of 1902.

The library had 25,000 volumes, having a well organized eatalogue, and the books well arranged in iron bookstands disposed in the rooms so as to receive lots of air and light, according to American system, and not placed against the walls, lining them as it used to be done formerly.

A publication of value Os Annaes da Bibliotheca c Archivo Publico eompletes a series of good services rendered to the public instruction by that excellent institution.

We will now speak of an establishment of manual work, obeying to the orientation of modern educators and to the necessity of practical teaching.

It is the Lauro Sodré institute installed in a splendid mansion, in the district of Mareo da Legua and which is one of the most eloquent proofs of the seriousness and patriotism of the Government of Pará.

Besides the 400 boarding pupils to whom the establishment furnishes instruction,



Belem. — Front view of the Lauro Sodré institute

house, elothing, food and everything, it accepts yet 100 pupils who sleep outside and follow the agricultural course.

The instruction administered in the institute has two general

courses: the primary, and that of application or professional.

The primary course is just the same as in the Government Grammar schools, and the application course is subdivided into industrial and agricultural courses.

The industrial course comprises arts, trades and industries, properly speaking. The agricultural course embraces the study of agriculture, in any of its branches, cattle raising and dairy industries.

The industrial courses are: book-binding, compositors and printers work, graphic arts, stenography, painting, decorating of buildings, carpenting, iron-smith work, boiler making, tin-smith work, shoemaker work, leather tanning work, tailoring, electrical-telegraphy, joiner's work, dyer's work, and machinist work.

The agricultural work which confers the diploma of Agricultural Regent, is a six year theoretical course accompanied by the school practical work in experimental fields, and laboratories, the student before receiving his diploma being compelled to have one year practice in an agricultural station, or in the same establishment.

The institute has 19 professors who teach: five of them the primary course, equivalent to the grammar school, one gymnastics, one instrumental music, one French, one geography, one chronology and history, one arithmetics, one algebra and plain geometry, one geometry in the space, one trigonometry and elementary mechanics, one physics and chemistry, one agriculture and industries, one zoology, elementary botany and agriculture, geology and mineralogy, one geometric and free hand drawing, one mechanical and architectural drawing, one cultivation of trees and horticulture, one agricultural engineering, rural buildings, rural and forestry technology, one vegetal entomology and microscopy, economy, countability and rural administration, and one animal hygiene, zootechny, and elements of pathology and siderotechny.

Visiting this instruction establishment, one of the best in Brazil, we had occasion to see among other things, great quantity of school furniture manufactured there for the public schools.

The local government doesn't buy any more furniture for its public school. Everything is furnished by this institute as it furnished all the uniforms for the state troops, etc.

It completes the practical demonstrations of the utility of this institute a well organised band formed by its students.

The Escola do Commercio, another institute of practical teaching, is also worthy of mention, and modeled after the Business Colleges of the United States. It was installed on the 13th may 1899.

The frequency in the Escola do Commercio is or was last year of 413 students.

The fine arts study was not neglected in this state. There is a Conservatory named Carlos Gomes, directed by the Brazilian maestro Menclen Campos, and this is a school worthy of all praise. It is installed in a Government building, and the government spends with this institution forty contos yearly. When we visited this establishment the number of pupils was 136.

The Fine Arts Academy, founded by a number of illustrious natives of Pará, fond of arts, though it is a private school, is rendering high services to the artistic education of the population. There are 30 pupils in it.



There are a number of other institutes devoted to instruction. The nature of this book does not allow us but to eite their names. We would have to write several volumes if we wanted to enter into the description of all the public instruction institutes of Pará and the other States of Brazil.

We will mention the Gentil Bittencourt Institute, devoted to the orphans and poor, and for it, a large building is being constructed at the government's expenses. The *Orphenilato Paraense*, also for the poor and orphans. The Benjamin Constant Lyceum, an arts and trades institute, devoted to the working classes and the poor and maintained by a private society. Instituto Paes de Carvalho, the expenses of which are made by the municipality. The Asylo de

Santo Antonio. O Seminario Episcopal, for theological instruction, and others the names of which I can't remember now.

Among the private establishments, receiving boarding pupils and outsiders, teaching primary and secondary instruction we can remember for boys: O Atheneu Paraense, one of the best of private schools, disposing of an excellent board of professors; the Collegio Minerva, an establishment with but four years existence, and is in excellent conditions of prosperity; The Collegio Immaculada Con-



Belem. - School group Building of Nazareth

ceição with a branch in the Amazon State; and the S. José, and Onze de Agosto Colleges.

For girls there are many schools and colleges, among which we can remember: Collegio Perseverança, under the direction of a normal school teacher D. Carlota Pistacchini; Collegio Valmont, entrusted to another normal school teacher D. Maria Valmont; the Our Lady de Nazareth, Franco-Americano, Santa Clara, Internato Immaculada conceição, Collegio Lisbonense, S. Luiz Gonzaga and other establishments.

As to the primary instruction or grammar schools we gathered the following notes:

In the capital the schools are gathered in groups, splendidly installed in government buildings. Each group, is composed of six or eight schools of both sexes. Are worthy of note those of the Baptista Campos square, magnificent building, 700 pupils, the Nazareth one with 600 pupils and a splendid building.

Dr. Amazonas de Figueiredo, secretary of the Pará government, who is the president of the Public Instruction Department, is a man of advanced ideas, a hustler, just like an American, has been a powerful factor of the progress this branch of public work has had lately. We owe to his kindness and to the care he devotes to the public instruction problem all the information we have gathered here and the following data:

Pará has to-day besides the groups, 577 isolated schools being:

	1	Cota	ıl.				577
Complementary ones	•		,	•		•	36
Elementary ones	٠						541

The elementary ones are thus divided:

Suburbs						305
1st class (villages)						90
2nd class (cities) .						86
3rd class (capital).						60
		Total				5H

Besides these there are school groups in the cities of Alemquer, Curuçá, Bragança, and Santarem. Sixteen elementary schools and eight complementary ones, being divided in 2 complementary and four elementary in each group.

The school statistics of the State in the years 1897, 1898 and 1899 show the following data excluding the pupils of the school groups in the eapital numbering 4.000:

ln 1897							24.071
ln 1898							26.978
In 1899							31.056

Pará spends with public instruction about two thousand contos, gold, and gives besides a subsidy for a pedagogie publication named A Escola which is the best of its kind in South America.

PUBLIC HELP. — Other institutions that give proof of the progress and greatness of Belem are among the public help ones, the following:

The City Hospital, known as the Santa Casa da Misericordia, one of the best of Brazil, is an enormous building, pavillions system, isolated, but near one another with different wards, disposed under a scientific view point around the Central building consisting of two tall structures. It is splendidly situated, in a position to receive the winds fresh breeze, and in its whole reminds one of the Bahia city hospital, facing the ample fields.



Belem. - Asylum for the poor. Interior Garden and Refectory; Men's Side

The Insane Asylum, is in the same conditions as the above, with regard to the make up and situation. It is a modern building, as it is modern all the interior installation ordered from Europe by the present Governor. The vast construction, with three prominent bodies, and its small dome, can be distinguished from among the neighboring buildings and gardens, as a monument raised by piety and science to relieve the misfortune of others.

The Asylo de Mendicidade inaugurated in 1902, is one of the best

we have seen. It is in the Italian Classic style, sober, elegant and costs one thousand and three hundred contos.

It is situated on the right hand side, kilometre 11 of the Bragança railway, between Marco da Legua and Souza. The Asylo de Mendicidade has 76 m. front 72,60 metres depth, and occupies an area of 5.517,60 square metres.

The building has three wings perpendicular to the main building. It has in the central wing accommodations for the Chapel, Pharmacy, Mess room for the employees, clothing storage rooms, pantry, kitchen, where there is an immense iron stove manufactured by the *Berta* firm of Rio Grande do Sul, sleeping rooms, bath tubs for the directors and employees.

We will not say much about the other buildings as the Asylo D. Lniz I, belonging to a Portuguese association, and others. There is no space for it.

Yet we can 't help it but to speak of some now under eonstruction, and which when finished will constitute so many more improve-



Senator A. Lemos. — Intendant of the Belem Municipality

ments for the city of Belem. They are: The Penitentiary a large building; the Aruparo College, and the Exchange Building, all of marble on one of the sides of the Independencia square. These are works that will show the importance of the city.

It would be unjust not to mention here the New Market, built by Senator A. Lemos.

It is of iron and slate, and situated on the Boulevard da Republica in a place known as *Ver o Peso* (see the weight). This is a traditional name that the inhabitants of Pará have preserved, while Senator Lemos does not

realize his improvements project in the river side, transforming then things, places and names.

The new market was inaugurated in December 1901. It occupies a surface of 2.068 square metres on a parallelogram of $31^{\rm m} \times 67^{\rm m}$, with towers on the corners, and doesn't absolutely resemble the other markets in the Southerner States, and worse yet the old Pará market, which is yet up in Rua 15 de Novembro as a legitimate

representative of old architecture though it is quite large and clean.

The front measures 4^{m} , 10 until the superior lines of the cornice which completes 8^{m} , 25 for the total height of the building.

There are other markets in Belem, but none is frequented as this one, neither is there any with such a fine aspect.

* *

The Commerce. — Once we are speaking of markets it occurs to us to say something about the commerce of Belem. This capital of Pará State, everyone knows it, is a large commercial market. And it couldn't be otherwise if we are to consider its geographical position. In the main streets of the active business district we see magnificent stores, displaying large and beautiful show windows. A visible opulence testifies the power and the credit of the market. The merchants have, generally, advanced ideas, but they all have the same complaints to make, which are heard from the commercial class, about the crisis, dull business, searcity of money and all that kind of talk, just the same as in Rio, in Bahia, in S. Paulo, and yet the importation grows at large pace, and the volume of business in all branches becomes larger every day. It is an eternal custom inherited from the Portuguese, this one of complaining for ever of business.

One who listens to a Brazilian lamenting national decadence, the crimes of the government, the adversities of every day or the bad condition of everything, the inferiority of the present. the bad business, would believe, that there is going to be a tremendous crisis, a serious misfortune threatening the nation. But after all the truth is that the country goes ahead. The figures take charge of speaking to us a language which is not so sad, and we become calm, in the end when we glance over them.

This is the reason why we prefer to jot down those figures than listen to the complaints of those people.

Until 1897 the banks of Pará used to give a dividend of 6 and 7 per eent, and does the reader want to know how many banks operate there, not including private banking houses?

Here they are:

,					
Banks.					Capital.
Do Pará					15.000:000\$000
Commercial do Pará					11.000:000\$000
Norte do Pará					2,000:000\$000
Belom do Pará					2.000:000\$000
Do Credito Popular					1.000:000\$000
London & Brazilian I	Ban	k			£ 1.500,000
River Plate Bank .					£ 1.500.000

The ships which entered the port of that capital in 1881 were 311 with 225.484 tons displacement. In 1891 there entered 610 ships with 472.300 tons displacement! Over the double increase in a decade.

The importations which in 1881 gave a total of 16.907: 911\$000, in 1894 went up to 34.740: 500\$000.

A side of the commercial development grows the local industry, and though all the activity is devoted to the exploitation of the forests and its kindred industries, sawing mills etc., there begin to appear different factories.



Belem. - Mausoleum of General Gnrjão in the Solidade Cemetery

Some of these are installed in the capital itself, others in other eities. The most important are the ropes, shirts, ready made clothing and paper ones, all of them working with steam. There are yet others manufacturing sanitary crockery, biscuits, candles, soap, ice, masses, carriages, sugar refineries and alcohol distillers. In Santarem and Bragança and other cities there are sawing mills, lime factories, small ship-yards etc.

The transportation service, is made by cabs and carriages and horse cars, but the municipality has already signed a contract to change the animal traction of the tramways for electricity. The old tramway company belonged to a Brazilian enterprize, and its cars not only run through the city, but go to the suburbs like Marco da Legua and other places.

One of those lines goes to José Bonifacio street where one of Belem cemeteries is situated.

Let us go in. They call it the Santa Isabel cemetery. It was inaugurated in 1880, on the 15 th., August.

When we visited it, there were lots of flowers. From the gate runs a wide street filled with trees crossed by narrower ones lined with marble stones with the conventional inscriptions — Here it is, — about which a writer once said to be the biggest of lies. The grave yard occupies 99.085 square metres in a part of the city looking towards the Guamá river. It has a railing all around and small chapel in gothic style is one of the most interesting we have seen.

Inside in mute squares there are the rows of tombs. We noted one where Eusebio Martin's family lies, having on top an angel white as snow. We noted yet another belonging to the Pacheco family in old style, but none had such a striking appearance as one at the right representing the Eyffel tower, in iron, with this simple word—perpetual.—

The keeper couldn't explain the meaning of it. There were quite a number of private monuments, some rich and artistic ones.

* *

The State troops. — The regiment of the State of Pará is one of the best organized military bodies of Brazil. It is composed of two battalions of infantry with 1.000 men, a squadron of cavalry with 200 men and an auxiliary artillery company with 100 men.

The uniforms are similar to those of the State troops in Bahia and they have modern guns and the horses are from the River Plate.

The different companies under the command-in-chief of a Federal Army officer who is to-day Colonel Sergio Fontoura. We saw several fencing drills, rifle target-shooting and general manœuvring drills, and we can assure that even in the regular army no better drilled men can be found than these State troops soldiers of Pará.

Besides this military force, charged with the police service of the whole state, the municipality maintains under the form of military organisation a fire company with 120 men, well disciplined. Their uniforms are elegant of thick grayish cloth, the material for the fire department work is excellent and they have a beautiful and adequate building for their quarters. It has two separate pavillions, connected by a central arch quite pretty. This fire department company has a band of music that has won reputation all over the country, and is one of the prides of the city whose municipality spares no expenses to keep up its reputation.

The narrow plan of this book prevents us from going into small er details about this beautiful city of Belem, to speak of its many and fine social clubs, its police service, public hygiene, benefit associations, its most important press, undoubtedly the most advanced



Type of revolver guns as used by the State Military Regiment at Para

in the North, having as its leader the « *Provincia* » the best Northern paper not only for its make up but for its influence and prestige. It would do honor even to a large European or American city. It circulates all over the country and no other provincial paper can rivalize with it.

For the same reason we abstain from writing about a number of interior cities worthy of mention, some just springing up, others already in full development. Opening an exception we will speak about two of them. They are Bragança and Santarém. The latter as we said above is on the right bank of the Tapajóz river, one of those Amazon tributaries that cause wonder to the foreigner. It is the seat of the municipality of the same name,

it has pretty official and private buildings, a beantiful palace where the Municipal Council meets, as well as are held the Court sessions. It was built in 1867 and is in the centre of Saō Sebastiāo Square. There is also the municipal dock and storage house strongly built according to the necessities of the local commerce, the new market built in 1897, two eatholic churches, one of which is quite large, named Our Lady of Conceição. There is yet a theatre — the Victoria — situated in Republica Square. It was built in 1895 by a pri-



Belem. - Building of Avenida Deodoro's scholar group

vate association, that offered it unconditionally to the municipality. The production of Santarem is the cocoa, Brazilian chestnuts, fish, rubber, tobaceo and cattle, all of which is produced with great abundance. It has among other agricultural and industrial establishments, steam sawing mills, lime and brick factories, and sugar cane brandy distillers, as well as shipyards well mounted for repairs in ships and steamers, and belonging to rich enterprizers. Due to these present conditions of development with large future possibilities, Santarem is an accessible and to-day much frequented port, not only by the steamers of regular lines calling there, but by those which run

up the Amazon in long trips without having to call there, but to Santarem they go after the many and abundant products it exports.

When we visited that important interior city in July 1902, its mayor was Mr. Raymundo E. Corrêa an intelligent and clever man and great worker of the local progress.

The municipality of Bragança has as seat the city of the same name which will soon be connected with the capital of the State by railway, partly constructed and already in operation. This is a great commercial municipality situated in the oceanic region of the State, and extending itself from the river Quatipurù until the Boranonga river.

It is bounded in the North by the ocean, in the South by the Ourém municipality, in the East by the Vizen municipality and in the West by the municipality of Matipurù. Besides those two rivers it has the Caeté, Arumajó, Aturiahy, Imborahy, Peroba, Arahy, all navigated by small boats. It is one of the best municipalities from the agricultural stand point. Everywhere we can see sugar cane plantations, rice, beans, corn, tobacco, the latter being a source of wealth as it is considered as one of the best in Brazil.

Cattle raising is earried on to considerable extent in this municipality, where besides its immense fields all along the North and West, has magnificent marines by the seashore which can be used to advantage for that purpose.

The seat of the municipality, the city of Bragança, is on the left side of the Caeté river, on a tract of land slightly inclined. Two rivers that limit the city on the North, South and West, — Rio Grande and Riozinho — furnish the city with the best desirable water.

The city has 11 streets and 13 lanes. Four of these streets, including the Visconde do Rio Branco one, were lately paved and the sewage exits cimented. Five of the lanes underwent the same improvement and that work keeps on being done in the other streets.

It has six squares called: Generalissimo Deodoro da Fronseca, S. Benedicto, Matriz, Republica, Conceição and Santa Rosa de Lima. They are all filled with trees. The Deodoro da Fronseca one, where the municipal palace is, Republica and Conceição have rows of beantiful mangueiros trees.

The S. Benedicto, Republica, Matriz and Deodoro da Fonseca are surranded by beautiful private buildings.

Recently an avenue was opened, called Augusto Montenegro, measuring 500 in length and 14 in width, beginning at Republica square, and ending in the river Rio Grande. Another avenue is

about to be opened, in a beautiful district and it will be called Senator Lemos. That avenue will be crossed by the public roads: Bacurytena, Campo de Cima, and Campo de Baixo.

For the loading and unloading of cargoes and landing of passengers, Bragança has four bridges, two in use, one being rebuilt and the other in construction.

The municipal building (City Hall) has 22 metres front, 9,50 in height and 30 metres deep. In it are the courts, the municipal council and the different departments of the same council in the upper floor and on the ground floor is the jail and the barracks. This building was erected in September 1901.



Dr. Augusto Montenegro. — Governor of the Pará State

Besides the municipal building above mentioned, there are yet in the city the building of the public market and the pretty building of the school house « Corrêa de Freitas ». The city is illuminated by 196 kerozene lamps of an improved model.

In the municipality of Bragança the local Government established a colony under the name of Benjamin Constant, with national and Spanish workingmen. This colony was connected with the seashore by a railway nine kilometres long, Decouville system, and is prospering a good deal. The mayor of Bragança is Mr. Antonio Pedro da S. Pereira, to whose kindness we owe the information we gathered.

This city will improve a good deal more when the railway which runs in full operation 141 kilometres shall reach there.

* *

The state of Pará has seriously attended to the colonisation problem, being worthy of praise the interest the Gorvernor of the State, Dr. Montenegro has taken in this regard. Here is a list of the colonies already emancipated in the several municipalities of the State of Pará.

COLONIAL NUCLEUS	NUMBER OF LOTS	LÔTS	TOTAL OF COLONISTS
Santa Rosa	184	155	721
Ferreira Penna	96	94	482
José de Alencar	221	221	1.311
inbangapy	143	143	890
Janetama	158	97	555
Benjamin Constant	527	142	2.551
Granja-America	50	45	270
Annita Garibaldi	134	130	727
Marapanim	158	157	925
Jambù-assú	377	5 69	1.980
Santa Rita do Caraná	22	25	139
Outeiro	14	15	68
Monte Alegre	100	97	552
Acará	30	30	181
Total	2.194	1.995	11.312

In this moment Pará disembarassed from that great commercial depression from 1900 to 1902, re-enters an era of activity. Its administration has found the right man in Dr. Augusto Montenegro. He is a clever and well educated man, a patriot, enterprizing but calm, tolerant but energetic. This illustrious Brazilian gave to the government of that part of the Republic a new and sound impulse, correcting what was to be corrected, awaking what was there to be created, elevating that way the name of the State of Pará, in the general opinion of the country and placing it in the place it had a

right to occupy for its social, political, economical and commercial importance. Thanks to this able and discreet governor, the great northern State went through the events of a tremendous financial crisis which the country suffered for over three years without feeling much of its bad effects, and now the wealthy State has recuperated its traditional habits of work and productivity, and presents itself before the Federation as a model to be followed, and example to stimulate others.

The following words with which Dr. Montenegro closed his message to the State Congress in 1902, explain better than any other document, the miracle of the excellent administration that saved Pará from the dangers and adversities, which have threatened it of late, placing it on the solid ground we found it on those days of our visit to that region:

"I have employed, he, said, my activity in all the branches in which public service is divided. None of the administrative subjects have been neglected by me, as I understand that only order and method can serve as guides to an administrator, in the midst of the complications of a government excessive difficulties brought about by a crisis which caused wonder to many and disturbed everybody.

I have an unshakable faith that the way I traced for myself to follow is the only one which will lead us to the raising of the economical and financial level of our State and I have confidence that the earnest efforts employed will soon be crowned by complete success.

We must convince ourselves that this is an age of sacrifices, and our strict duty is to do them. Later on we will gather the fruit of the sound, modest and reflected and at the same time energetic and honest politics, that we are at present following. »

We were eye witnesses of all sorts of results brought to the Pará State through this benefit polities. The existing anarchy ceased, the disturbances that dreamt of dominating the streams of Belem ceased also. The laboring tranquility has been re-established, that tranquility that generates the public wealth and the welfare of the population. The commercial classes recommenced their work of the expansion of business, of the re-edification of the credit shaken by the late crisis.

In short: Pará by its constant progress, by the political and administrative order that presides to-day under the care of a young patriot, learned and honest, as Dr. Montenegro is, occupies now a beautiful place at the head of the 20 States of the Brazilian federation and everything indicates it will keep its place.

THE STATE OF MARANHÃO.

On a Monday of July, 1902, in the morning we were entering the bar of Maranhão on board of the « Pernambuco » of the Brazilian Lloyd eompany.

At the entrance of the bar there is an ancient bulwark of eireular form, the work of the Portuguese. The horizon around is lined with humble green hills. The city is at the bottom on the left, upon a hill.

The port is not a favorable one, at least for a ship of deep draught. They told us, however, that big ships have already entered there.

What we saw was that the bottom was low. The color of the water indicates it. Thick spots delineate from side to side, the neutre green of the tranquil basin, marking the presence of large sand banks. The mud thickens with the time and the banks grow larger and spoil the port and narrow the canals.



Senator Benedicto Leite

Our steamer could not penetrate, we anchored ontside awaiting the high tide.

From there we could see high ravines of red earth, cut straight down. In the anchorage there is some animation, there are several steamers unloading. A boat is starting. It belongs to the navigation line between S. Luiz and Caxias.

Later on our steamer went in.

Now we can see from near the city, that agglomeration of buildings of all colors, rose, yellow, blue, white, all leaning against the mountain. Several chimneys let out clouds of smoke that

dirty the pretty blue of the sky, sing the hynm of industrial labor. At the proportion grows nearer the city we discover other fronts of houses, some large, some small, some grouped together, some isolated, in the same attitude of going up the hill, some coming down, some going up.

This city was at one time the most important in the North of Brazil, but Belem, the capital of Pará State, exceeded it in population and wealth. It did not exceed it, however, in the love for the sciences

and literature, which the native of Maranhão keeps with jealousy and pride, the just pride of its intellectual traditious, that gave to the capital of the State the title of Brazilian Athens, title disputed also by the State of Bahia. And — curious thing — it isn't only in that, that S. Luiz, capital of Maranhão resembles Bahia. Its streets and



S. Luiz. - The Municipal Administration

inclined plan, its large number of buildings of Portuguese style etc., bring recollections of Bahia, the old capital of Brazil.

There are two capitals of Brazilian States which are not, properly said, in the State, that is placed in its continental territory, but in an isolated fragment of it, inside of islands, which more or less geographical belong to the State, but, after all, separated by the sea, such



ESTATE OF MARANHÀO — PANORAMIC VIEW OF THE CITY AND HARBOR OF S. LUIZ

eities present that peculiarity: they are insular capitals, heads separated from the bodies they direct: one is Desterro, in the South, the other is S. Luiz in the North.

Like Desterro, also, S. Luiz lacks the aspects of modern capitals. It is, however, the most important sea coast city between Recife and Belem.

It was built by the French. A certain Mr. La Ravardière, founded it in 1610 and in honor of Louis the thirteenth gave it the name of S. Luiz, name it has preserved to this day.

The city is placed on an uneven ground, with some places lower than others. We go up, as we land, by a steep inclined street which leads to the *Maranhènse* avenue. At the left is the governor's palace and that of the municipality (the city hall), modest buildings, of the time of the Portuguese, and preserved by the administration that deems it wiser to invest the State money in schools, gymnasiums, etc., than in reforming old buildings. When the conditions of the public fonds are better the reform of the buildings will be made from top to the bottom.

The governor's palaee was formerly a convent. It is an enormous building with two floors, treated with eare and clean. The main hall, decorated with sobriety and deceney, is on the upper floor, and away inside are the different departments of the Governor's office. In the front a large door opens showing the splendid stairway entrance of Portuguese marble. The stairway leads to the private office and the different departments of the Government.

At the side of this building is the City Hall, also with two floors, with a front which doesn't display luxury but doesn't cause a bad impression to the visitor. We went through the whole building in August of 1902, The mayor of the city was Colonel Nuno Alvares da Cunha, a pleasant gentleman to whom the city owes great improvements. Everything we saw was praise worthy. In a part of this building is temporarilly installed the local legislature.

The buildings in S. Luiz have noth ing characteristic, but the modern buildings, which are not now in small number, are modifying in a gaily way that tone of antiquity of the active capital of Maranhão.

The streets are paved and much cleaner than the streets of many a city in other States. A large number are of pleasant aspect, and unexpected, thanks to the inclination of the soil.

The administration of the last years, has employed earnest efforts, which the natives of Maranhão must thank for. It ordered the transformation of the empty fields into gardens.

The Benedieto Leite square, for instance, though small is an expressive homage to the patriot whose services to Maranhão can never be over compensated. It has a beautiful garden, and is really charming in its feature of park *mignon*.

In front of the old Carmo convent was also an empty square, abandoned, but to-day has been levelled and planted with pretty bushes and trees. They call it João Lisbõa square, in homage to the great Brazilian writer of that name.



S. Luiz. - Benedicto Leite Square

Another square is the — Odorieo Mendes — which presents the same charming aspect.

Our preferences, however, go to the large and beautiful Gonçalves Dias square.

We will now make a little opening:

In the South the squares are christened with names of generals and admirals. There in S. Luiz they prefer the names of poets and

literary men. It is a little exteriorisation of the soul of those people. *Ex-abundancia enim cordis os loquitur*, (the mouth speaks of the one whose heart is full), says the book of books.

But, going back to our subject, none of those city's squares pleased me as much as the one dedicated to the celebrated poet. It is surrounded of palm trees, through which can be seen the figure of the poet that so much loved that city.



S. Luiz. - Gonçalves Dias Monument

It is placed on an original marble column erected in the centre of the square, standing in the attitude of one who contemplates the sea. We said original column and will explain why: because it is different from all others of its kind, because the column instead of surrounded of acantho and oak leaves, has palms as we see in the egyptian constructions. It is a new type of column. But let us leave the troubadour where he is surrounded by his favorite palm trees, as he said in his verses

Nesse logar solitario
Seu fadario
De ver o mar se recreia;
De o ver á tardc dormente,
Docemente
Suspirar na branca areia

(In that lonely place his fatal lot finds recreation in contemplating the sea; in looking at it in sweet sleep sighing on the white sand.)

Let us go on visiting the city.

In one of the angles of the square they are finishing a pretty and large church of gothic style, which is going to be one of the decorations of the city and will be called our Lady dos Remedios.



S. Luiz, - Gomes de Castro Avenue

Contrasting with the old streets, new streets are being torn wide, with rows of trees and they will speak in the future well deserved praises to the present administration.

Among them we mention the Gomes de Castro Avenue, wide and level, with a nice display of illumination and pretty trees.

Among the buildings worthy of note we will cite the S. Luiz theatre, a large building recently rebuilt, with capacity to seat 1000 people and nicely furnished. The curtain was painted by Coliva a scenographer of repute in Rio de Janeiro. The interior has a fine aspect and four rows of boxes.

In the broad vestibule we see fine oil paintings, pictures of celebrated writers and actors.

The Campo de Ourique barracks, enormous building is note worthy because of its large proportions, though it is not so for its architecture.

The city is crossed by street railway lines, and though to-day the trams are drawn by animal traction, arrangements are being made to introduce electricity. There is a company supplying the water for



S. Luiz. - Reading-room of the Public Library

the city, conveniently sent through pipes, and another one furnishing hidro-earbonic gas for the illumination.

* *

According to statistics data of 1899, there were in the city 29 dry goods houses and groceries, 181 retail groceries, 5 hardware stores, 6 grain exporters, 6 sugar export houses, 18 lumber yards, 22 shoe stores, 14 lime stores, 7 sewing-machines stores, 6 mineral waters, 1 powder, 6 crockery, 3 bric-à-brac, 3 coal, 10 cigar stores, 2 billiard

rooms, 20 bakers, 11 sugar refineries, 2 livery stables, 5 book stores, 4 auctioneers, 5 liquor stores, 20 butchers, and 12 pork merchants. There are also, 7 private schools for boys, 5 for girls, 29 professors of languages and sciences, 3 of drawing, 2 of book-keeping, 11 of music, 5 civil engineers, 16 physicians, 2 dentists, 8 pharmacies, 14 lawyers, 6 solicitors, 35 compositors, 36 book-keepers, 1 stenographer, 23 tailor shops, 23 barber shops, 8 trunk manufacturers, 20 tinsmith shops, 26 shoemakers, 26 cabinet makers, 21 dressmakers, 10 goldsmiths, 3 boiler makers, 4 stone-jewellers, 1 calker, 4 watch makers, 7 ironsmiths, 1 images maker, 1 wooden-soled shoes manufacturers, 6 coopers, 5 music instruments manufacturers, 1 matrasses maker, 1 sadler, 2 engravers, 3 undertakers, 2 hotels and



S. Luiz. - St Antonino's Church and square

boarding houses, 3 photographers, 8 printing offices, 4 piano tuners, 1 gilder, 3 builders, 6 binders, 8 stevedores, 1 upholster, 2 iron foundries, 5 lighters owners, 12 boat owners, 2 shipyards and quite a number of factories.

* *

Industry, Commerce, Navigation. — One thing that can't help being referred to by the visitor if he has to speak about the city, is the number relatively large of factories working in S. Luiz. Cotton mills alone we counted six, and still there are two other threading mills, one lead factory, one crockery, one matches, six rice, five olive oil factories, three alcoholic drinks distillers, one shoe, two

eandle, two hat and two umbrella manufacturers, two factories of ladies hats, two chocolate, seven fire works, two hosiery, six soap and six vinegar factories, and two steam saw-mills,

There are three banks in S. Luiz, and among other enterprizes there are two railway companies and the navigation ones which earry to far away cities alongshore the proof of Maranhão's activity.

They are the « Companhia Fluvial Maranhense », and the « Companhia de Navegação a Vapor ».

The latter the most important one, is subsidized by the federal government, sends its steamers as far as Manáos and Rio de



S. Luiz. - View of a Part of the « rua do Sol »

Janeiro, being the owner of the following steamers: Oriente, Occidente, Colombo, Cabral, and Continente, lately received from Europe, and for the river navigation the tug-boats: Mearim, Gomes de Castro, Caxiense, Ypiranga and Maranhense, and 26 boats to be towed and seven lighters.

The Companhia Fluvial Maranhense, subsidized by the State government with 36 contos yearly devotes itself altogether to the river navigation for which service it has five small steamers: Vianna, Victoria, Barão de Grajahu, Gonçalves Dias and Lidador and eight lighters.

The Grajahu river navigation not long ago considered impraeticable, was inaugurated two years ago, by this company. These two

enterprizes, that have rendered so many useful services to the progress of the State, show at the same time the aptitude of the natives of Maranhão, for business and industrial pursuits.

We will now give a table of the enterprizes established at present in Maranhão according to the information of Mr. Fram Pacheco:

Local Enterprizes	Capital realized
Baneo do Maranhão	1.350:000\$000
Banco Commercio do Maranhão	1.551:500\$000
Banco Hypothecario e Commercial do Maranhão .	. 1.020:000\$000
Companhia Fabril Maranhense	1.700:000\$000
Companhia Fiação e Tecidos do Rio Anil	1.575:690\$000
Companhia de Navegação a Vapor do Maranhão	1.500:000\$000
Companhia Fiação e Tecidos Marenhense	1.200:000\$000
Companhia Fiação e Tecidos de Canhamo	900:000\$000
Companhia Manufactureira e Agricola do Maranhão	899:900\$000
Companhia União Caxiense	850:000\$000
Companhia Progresso Agricola	· 754:200\$000
Companhia de Hluminação a Gaz	540:000\$000
Companhia Industrial Caxiense	:00:000\$000
Campanhia das Aguas S. Luiz	444:000\$000
Companhia Fluvial Maranhense	436:000\$000
Companhia Ferro Carril Maranhense	400:000\$600
Companhia Santa Amelia (antiga Lauificios)	500:009\$000
Companhia de Seguros Maranhense	250:000\$000
Campanbia Industrial Marauhense	257:740\$000
Companhia Alliança	210:000\$000
Companhia Popular Seguradora	200:000\$000
Companhia Usina Castello	160:000\$000
Companhia Fabrico de Chumbo	150:000\$000
Companhia de Seguros Esperança	100:000\$000
Companhia Telephonica	40:000\$000
Engenho d'Agna, em Caxias'	550:000\$000
Empreza Tecelagem S. Luiz	500:000\$000
Empreza Fabrica de Phosphoros	270:000\$000
Usina Renascença, em Pericuman	150:000\$000
Empreza Sanharo, em Caxias	100:000\$000
	18.416:830\$000

As to railways there are two in Maranhão:

From Caxias to Cajazeiras. . . . 79 kilometres From Engenho Central to S. Pedro. 10 kilometres

The one from Caxias to Araguaya is now being eonstructed and will be 182 kilometres long.

* *

Public Instruction and Culture. — We will now give some information on the institutes of public instruction in the capital.

The first place belongs to the grand literary temple which is its Public Library. It is installed in a Government building, the halls are airy, roomy and well illuminated. They are filled with wooden bookstands containing 19,000 volumes carefully watched over by the librarian, Mr. Antonio Lobo, who organised its catalogue. He is one of the most competent men in Brazil for this branch of work, not only because of his scientific culture, but because of his special knowledge on bibliography and librarianship, so well in evidence in his work while directing that establishment.

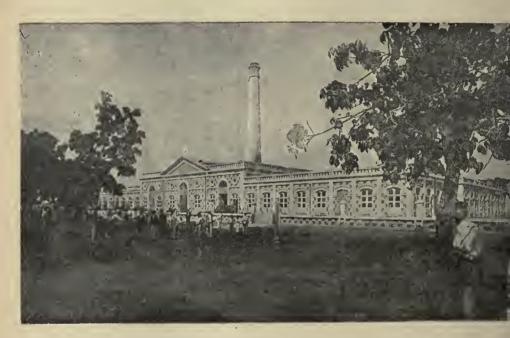


S. Luiz. - Part of the « rua dos Remedios »

One of the good innovations of the Maranhão Library, is the ladies section, where a special collection for them is to be found, consisting mainly of vulgarisation books, fashion papers, books on art and household affairs, etc.

Another institution we visited with great pleasure was the Model School, founded by Dr Benedicto Leite, Senator, political-chief and now governor of the State. We were there on a weekday, it was the 4th. of Septembre 1902. The establishment was filled with pupils. They presented an appearance of contentment. The professors in the class rooms, taught them wise teachings of universal knowledge, handled the specimens of the natural history cabinet, the complicated vases of the chemistry laboratory, while in other halls the pedagogy profes-

sors gave lessons of things by the Fræbel system, explaining solid bodies, its forms, etc., in a practical way showing the objects to the pupils. And one hundred heads of all shades, from the light blonde to the darkest brunette, attentive, with bright looks, accompanied the rythm of that grave eremony, the most grave and most beautiful, of the State's performance of duties — to transmit ideas and notions to the young brains thirsty for knowledge. They all listened with attention and pleasure to the professors teachings. And how the State cares seriously for the mission it undertook to perform! It suffices



Large Manufactory of cotton tissues « Manufactora Caxiense »

to say that the director of that establishment is a man of prominence in politics and in opposition to the government, but he was a competent man, and that drawback was overlooked, as competency was the only requirement to be exacted from him to be entrusted with that position. This is an institution that honors Maranhão. It has cabinets and laboratories for the study of natural history, physics, chemistry, it has a pedagogic museum, gymnastic apparatus, (modern gymnastic) sewing and ladies works section, etc.

The music school recently founded is a good institute for artistic teaching and it is under the direction of the maestro A. Rayol.

Public instruction is administered through the State by 217 gram-

mar schools, and a few high schools, in the capital, as the Maranhense Lyeenm, Theological Seminary and others.

There are in the capital 16 private schools:

For	girls					6
For	$_{\rm boys}$					10
		Т	ota	1.		16

which were frequented in 1902 by 1.085 seholars:

	Total.				1.085
Girls		٠	٠	٠	605
Boys.					180



S. Luiz. — Da Misericordia Hospital

The S. Luiz city is one of the Brazilian cities where the Portuguese element has established deeper roots. Just as Rio and Bahia it presents to the visitor in its buildings and many of its customs and even in the large number of negroes in relation to the total of population, just so many recollections not easily forgotten of the passage of the Portuguese colonist in those regions. Not long ago J. Leitão, a Portuguese journalist wrote: « In Maranhão the vestige of our colonisation is recognised even by the vices of Portuguese language and by our provincialisms adopted by them. »

Another foreigner observer, Mr. Temple, the English consul in his official report on the State of Maranhão wrote: « There are in the interior a large number of Indians in their primitive state, at

the same time that the proportion of negroes in the cities and civilised spots, due to the large importation of slaves in past years, is perhaps larger in Maranhão than in any other state of Brazil, excepting Bahia. »

The illustrious writer Fram Pacheco, who so brilliantly edits in Maranhão the *Revista do Norte*, commenting this remark of the English consul in his report, wrote in his turn the following paragraph, which corroborates our assertion: « The excess of negroes, stated by the English consul, is, unfortunately for us, true. This race, indolent and full of vices, though extremely affectionate, embodies the main drawback of the progress of this State as well as that of Bahia, whereto even to-day a large number of negroes go. These two States need an earnest irrigation of white blood, if per chance they are thinking of their future society. »

Then, the representatives of European descent, the most apt, the most competent, emigrate, also go too in search of places far away from Maranhão, like Pará, Amazon, Rio and S. Paulo to develop their activity. It is in that way that we see Arthur Azevedo, Coelho Netto, Aluizio, Aarão Reis and many, many others are filling with the brilliancy of their names the cultured life of the great centres.

The same phenomenon happens in larger proportions in Bahia. We went all through Brazil from North to South and did not find a city where in the group of prominent men there should not be at least one native of Bahia. In some places they monopolise the good situations and the most profitable professions, carrying thus the contribution of their talent and their activity, to the work of evolution and progress of the country, while their original province marches slowly in such a feeble pace that it seems stationary.

The remedy to counterbalance the inconveniences of this phenomenon, would be, in our opinion, and in that of the writer I referred to above, to increase European immigration, to transfuse, into the race weakened by African crossing, a regenerating current of Arian blood as Fram Pacheco very well said: The duty of those who govern, each day more negent, each day more needed, is, to promote a strong current of immigration from the people of latin civilisation, and also the germanic one as well. The centre, the West, and the North of Brazil need, very much indeed, to be evenly distributed through a general plan, in combination with the Federal and the different States governments. »

The State troops consist of one infantry batallion with 430 men commanded by a Lieutenant-Colonel, and a detachment of 20 men cavalry. They have fine uniforms, and maintain perfect discipline.

S. Luiz is illuminated by hydro-earbonic gas, but soon will have electricity.

We hope that under the wise direct administration of Governor Dr Benedicto Leite, we will soon see Maranhão quite transformed and improved, occupying an honorable place among the coast cities. And we have so many more reasons for hoping so because we know that State has resources, large and numerous natural resources to exist and grow larger and richer among the richest of the Brazilian States.

THE STATES OF PIAUHY AND CEARA

Really, we ought not to include Piauhy in the number of the maritime, or coast States. It has but a short extension of coast in proportion of its territorial surface, and even in proportion of its river banks having, as it has, the long and strong Parnahyba.

Whoever looks at the map of Brazil will understand fully well what we mean: the Piauhy has the configuration of a bean shell, crossed by ridges of mountains, and the stem of which, inclined towards the Atlantic, is formed by that tract of coastland between Amarração and the mouth of the Parnahyba. This short coastland is all that Piauhy can show to pretend to be included in the number of the maritime States of the Union.

There is no large anchorage place — that of Amarração being, we might say, devoid of any conditions of development. — So that, its true port, the actual organ of appropriation and outlet of the State, is its small city of Parnahyba, in the fluvial coast where also is Therezina.

All the territorial body of Piauhy, is an interior region, just as Goyaz and Minas.

Piauly has not been able to follow the progress of the other maritime States, neither has it in the Federation the importance corresponding to its territorial extension, larger than that of São Paulo, Pernambueo, Rio Grande do Sul, Rio de Janeiro, Ceará and others, just to cite only the most advanced, Piauly being the eighth State of Brazil in the order of the total surface.

Its population, however, does not accompany the same proportion. In all the State there are only 350,000 inhabitants. Although the eighth in the list for its size, is it the sixteenth for the density of its population.

The short shore of Piauhy which I went through in 1902 makes no difference with that between the North of Parahyba, Rio Grande, Ceará and South of Maranhão. It is of one single physiognomy, low and melancholic, developed in extensive sheets of sand interrupted here and there at long spaces by small and poor carpets of that rickety vegetation of the sandy land. The sea is relatively low, filled



Therezina. — Aquidaban Square and Quatro de Setembro Theatre

with sand banks, and unsteady crowns, but the waters are of peculiar hues running all the full range of the green color from the very lightest to the darkest.

That stretch of shore belonging to Pianhy, is formed, almost completely, by the coast of an island called Ilha Grande, which closes, as if with a cork, the narrow neck of the territory of Pianhy turned to the ocean, and it is in it, a little further ahead towards the North, that the small bay called Tutoya, is to be found. This is a forced point where the coast navigation calls, and has been for some time disputed by two States, Maranhão and Pianhy.

It is a small sheltered anchorage with green and low banks, where

there are but a few hamlets, and a few stores and storage houses. To be sure, before long we will see there a commercial city, one of those generated and developed by the navigation. Modern elements for the blessed struggles of progress and civilisation.

Where does its name, Piauhy, come from? The historical name, according to what the old historians and geographers wrote was Piagni. Thus it was also written by the celebrated Sebastião da Rocha Pitta.

He describes, in that peculiar style of his which is a pleasure to translate, the very beginning of Piaguî or Piauhy, a follows:

« By this time the extension of lands in which we had penetrated



Therezina. - S. Benedicto's Church

in the interior of this region was amplified still a little more than in 1671 when it was discovered the places denominated Piagui, a large tract of land which is at ten degrees from the North, beyond the S. Francisco river towards Pernambuco in the continent of that province and not very far from Maranhão. It took the name of a river which was so poor that it ought not to have one to give away. This river only runs when there is rain, and in summer dries up leaving a pool here and there. The same happens with six other little rivers which bath that region. These are, the Canindé, the Itaim, the S. Victor, the Puti, the Longajes and the Piracuruca. They, however, through several ways, more or less contribute to the swel-

ling of the Parnahyba, river, which, with them, reach the opulent ocean in the coast of Maranhão. »

The ex-province of Piauly, according to the political statute agreed upon all over the republic, was organized as an Estate on the 13th, of June 1892, and divided its territory in 34 municipalities, each with a mayor, a legislative council, 17 districts with 18 judges (the capital having two) 36 wards and 34 judiciary districts: Amarante, Amarração, Apparecida, Alto Longá, Barras, Bom Jesus, Burity dos Lopes, Belém, Campos Salles, Campo Maior, Castello, Corrente, Floriano, Itamaraty, Jaicós, Jurumenha, Livramento, Ociras, Parnahyba, Parnaguá, Patrocinio, Paulista, Peripery, Piracuruca, Picos, Porto Alegre, Regeneração, Santa Philomena, S. João do



View of a part of the city of Parnahyba

Piauly, S. Raymundo Nonnato, Santo Antonio de Gilboés, Therezina (capital), União and Valença.

Its principal products and industries are: cattle (of all kinds), cotton, grains, skins, dyeing establishments, tobacco, sugar cane brandy, sugar, butter, cheese, building lumber, carnahuba wax, maniçoba and mangabeira-trees rubber, fowl, copahyba oils, cotton seed, rosins essences and others.

The State Legistative Congress is composed of 24 members, serving terms of four years. It has four Congressmen and three senators to represent it in the National Congress.

Its Capital is Therezina, situated on the right bank of the Parnahyba river. It is a small but pretty city, divided into 12 districts and two parishes, Amparo and Our Lady das Dôres. It has a population of about 25.000 inhabitants, and was founded in 1852. It has about 2.000 houses (not including small hamlets), 20 streets, wide and straight, some with trees, seven large squares, three churches and several public buildings.

Among those the best are: The Government palace, State and Municipal legislature buildings, State troops barracks, Court House, Board of Health, Public Works, Lyceum, Official printing Office, Public Market, Jail, « Quatro de Setembro » theatre, Treasury, Post Office, Telegraph (in a private house), Regular troops barracks, City Hospital, and two pretty cemeteries.



Plauby. - City of Parnahyba, rua Grande

There are: a cotton mill with 120 looms, in a building occupying an area of 500 metres, a steam foundry, a soap factory, one shelling and pressing cotton factory, a fluvial navigation steamship company, having three steamers, there being also other private steamboats, one maritime insurance company, a Lyceum with all the privileges of the National Gymnasium and which is frequented by 400 students.

* *

The city of Parnahyba, which took the name of the principal river of the State, is to-day the most important city after the Capital, only as to its commerce which is developing on a large scale. It is situated on one of the banks of the Igaussn river, one of the affluents of the Parnahyba river, 15 kilometres away from the river and 80 from the Capital. It has some pretty buildings, a good telephonic net, and, like the Capital is illuminated with kerosene oil.

There is a Custom House and Port Department, and its population is of about 10.000 inhabitants.

In this city amongst other good buildings, must be mentioned the Charity Hospital, maintained by a private civil association. Parnahyba, however, is not so young as Therezina and other cities of the State. It was already a village in 1761 and was officially installed on the 26th of August 1762. By a provincial law of the 16th of August 1844 it became a city, much before the foundation of the capital.

It has only one parish: Our Lady da Graça, whose image the natives of Parnahyba adore in the church of the same name, a modest old temple, of no great value either as to its size or architecture. The city is divided into three police precinets.

Oeiras. — If the above city is noted by its commerce, thanks to its position, between the capital and the external markets, Oeiras is noted by its historical past, its material advancement, and its population, the largest of the State, excepting Therezina, having about 20.000 inhabitants as per the 1902 census. It has had formerly the honors of Capital.

Just as Parnahyba it is not one of the youngest cities. With the peculiar name of Mocha or Moxa, an indigene name, was already a village in June 1712, and in the year 1761 was elevated to city, the metropolis giving it the illustrious name of a noble Portuguese city — Ociras, — which it has preserved until to-day, which is right. We see no reason why geographical names should be changed with the feminine frivolity of changing fashion styles as it is done in South America.

Regarding the foundation of that old city (ancient only in relation to the Capital) we find in a noted chronicler of the colonial times the following interesting paragraph: «......it is a village that the extremely serene king D. João Vordered to be founded by Dr. Vicente Leite Ripado, Ouvidor do Maranhão (ouvidor was an ancient official position) and the latter did so in 1718 invocating Our Lady da Victoria and Moxa the name of the place where it was built.»

To-day Oeiras is a picturesque city with the kind and calm physiognomy of those interior cities, when the cosmopolitan fermentation has not as yet saturated its structure making burst through it the noise of the sea-shore cities entirely mixed up, disturbed and changed.

It is divided into four policial precincts: Ociras, Santo Ignacio, Terceiro and Quarto, all forming one single parish, named Our Lady da Victoria, the same church of the foundation of the city, the population of which as per the 1892 census was 19.850 inhabitants, to-day having some 25.000. There are in this city 2689 houses, 3 churches and 7 schools.

AMARANTE, — is the third city of the State. Its population is of 15.525 inhabitants, 7.612 men and 7.913 women. It occupies the third place not only on account of its population, but because of its active commerce in the region of which it is the seat. It is situated at the bar of a small river called Mulato, and was elevated to the rank of city in August 1871.

Valença. — There is also a city of this name in Piauhy, and though in its size and industrial importance may be quite at a distance from the city of the same name in Bahia, it is worthy of mention because its population by the last census is I3.764 inhabitants. The last census was taken in 1900 and the above number includes the inhabitants of the surrouding municipalities of which Valença is the seat. Situated on the bank of a small rivulet called Catinguinha, it had this name for a long time, but in October 1761 was elevated to the rank of a village, and adopted the present name. It is at 42 leagues distance from Therezina and consequently it is easy to imagine how slow it will be in its development. It is divided into three districts, forming the parish of Nossa Senhora do O'. (Our Lady of the O'.)

Marathoan. — It comprises three districts; parish (Our Lady of the Conception). Nossa Senhora da Conceição das Barras de Marathoan. Population 12.384 inhabitants.

Campo-Maior, — is one of the best cities of Piauhy, which, in truth, if we are to be exacting it, has only one city which descrives that classification — it is the Capital. — The others are nothing but groups of houses, with a larger or smaller number, without the least importance, and all of them with but little energy, contributing but little to the development of the national production and wealth.

Campo-Maior, being one of the best eities of Piauhy, has no more than 350 buildings worthy of the name, forming eight streets and two squares which have neither garden nor pavement. In the surrounding neighborhood is a place called Genipapo where on the 23rd of March, 1823 there was a frightful encounter between Brazilians and the Portuguese colonial troops of the metropolis.

The municipality of which Campo-Maior is the seat, extends itself through a tract of land generally level, covered, in a large portion of it, with carnauba-trees. From South to North it is bathed by the Longá river, which starts from there and after a 50 league course runs into the Parnahyba. In that Longa valley run the following tributaries belonging to the municipality: — Sorubim, Genipapo, Marathoan, Titaras, Riacho Fundo, Corrente, and others of smaller importance. Its climate is warm and dry, cooled by a most healthy constant ventilation. The soil is rich and fertile.

At present they cultivate there: mandioca, corn, rice, beans, sugar cane, but these only for the maintainance of the population. There are mines in these regions but they never were exploited. The principal industry is eattle raising, which is done in a large scale, but by slow and backward processes. Often in the dry season the dryness is such that it nearly exterminates the eattle which is the only fortune of the State. In this like in other municipalities for some years past there has been a rapid decrease in this industry, and if it keeps on like that it is easy to foresee its end, and this is due to the negligence of the population of the interior. Its commerce, nearly all done with Maranhão and Parnahyba markets, is small, due to the lack of transportation facilities, which is all of it made by animals. Its exports are - eattle, skins, cheese and other dairy products, and earnahuba-tree wax. This latter industry has been somewhat developed. The Campo-Maior eity is situated 20 leagues at the east side of the Capital, on the banks of the Sorubim, in the centre of vast fields of an indescribable beauty. It is one of the oldest cities of Piauhy.

Campos Salles, — is a small and modest village. It is named after the last president of Brazil and consequently of recent date.

It was a small place settled by a provincial law in August 1853, under the name of Batalha. It was elevated to the rank of village in 1899 and, as we said above, in honor of President Campos Salles, whose term was 1898-1902, changed its name.

This pretty village is situated at the North of the State of Piauhy, and is bound at the east by the municipalities of Piracuruca and Piripery, at the North by Burity dos Lopes, at the West and South by Barras. It has a pleasant climate. This municipality is bathed by the Longá river, which comes from the upper Longa municipality

and runs through the municipalities of Campo-Maior, the Barras river which serves partly to separate this municipality from the last one of the others and follows by Barras do Longá till the Parnahyba river. The other one is the river Mattos which bathes this municipality and runs to the Longá river. The Piracuruca river is also an affluent of the Longá, running into it in a place called Barra, serving there as boundary line with Piracuruca municipality.



Piauhy Types. - A cow-keeper

None of the rivers of the locality are navigable. The dry seasons securge this municipality destroying its agriculture, though in some places there are some strong springs of fresh water to wet large areas of land. At a distance of one or one and a half league from this village are the places called Brejos de Cima, and Brejos de Baixo and S. Lazaro, which, if regularly cultivated, and in any of them established an industrial concern for the manufacturing of sugar and sugar cane brandy, would produce sufficiently, not

only to supply that district but the whole State. Its population, however, just like the interior population of the other States lack activity. Campo-Maior has also extensive territory filled with rich woods, among which are the following varieties, yet none are exported: eedar, piquiseiro, pau d'areo, jacarandá, tacajuba, aroeira, violet, umburana, tamboril, bacury and many others.

THE STATE OF CEARA

By the sea-shore in a stretch where it justifies the assertion of the great poet: — brave green seas — there is an enormous sheet of snow-white sands, a sad brightness of long shores, which are the coasts of old *Itarema*, to-day Ceará.

It is a desolate immense sea-shore, spreading for leagues and leagues white sand, here lowly with slight ondulations, there in hilly form, horrible with all its barrenness.

In that sandy band, surrounded by it, threatened each day by the approximation of its moving ondulations, men settled a group of houses in 1649, and it has resisted and grown, and to-day is Fortaleza, the Capital of one of the Brazilian States.

It is not the Portuguese but the Dutch who are responsible for that bad selection of that spot for a city which has to defend itself from the sands.

It may be that the port was the cause, the motive of its selection. It is possibly so. It may also be, that at the time that Mathias Beck, the founder of the city, came there, the Ceará coast offered in that place a deep and sheltering bay, the ups and downs of sand which dance to-day so horribly by the music of the southern winds, may be that they were then firm, subjugated, pressed by the triumphal vegetation of the mango and cocoanut trees. All these are guessings..... The reality of to-day is that the sea beats those shores spreading the dust of those sands, so fine, but so barren and so warm. The trees dried up, its trunks died, the roots have disappeared and in an extensive band of the coast, between the ridge of mountains and the sea, dominates this arid, barren spot, unconscious of the residues from the old rocks and the thirsty sands that intimidate man and defy the ocean.

Once landed, the visitor cannot see the city without overcoming a kind of sand barrier that separates it from the sea. He goes over a stretch which is not yet properly the city, goes up an inclined streetlike plan, leaving at the right a large building of military architecture, abandoned, but in perfect state of preservation, leaves also at the side the Sailors School and walking a few steps more he will be in a wide square filled with trees, and there the large eathedral is, with its cross aisle in the middle of the churchyard and surrounded by railing.

The city spreads itself beyond in a plan which is several metres



Fortaleza. - Public Market

above the sea, with its streets, all straight and wide, elean and unobstructed.

About 50.000 inhabitants live there. The buildings have nothing characteristic, but are well eared for, and in the majority they are one floor houses. In the streets Formosa, Marechal Floriano and nearly all the others there are fine houses with upper stories. But it is in the suburbs of Benifica, Mororó, and others, all very healthy places, that the best buildings of modern architecture can be seen.

The general aspect of the city is gay and pretty. To a certain extent Fortaleza contrasts with the other capitals of the colonial times, by the symetry and alignement of the streets which reminds one of a chess-board.

As to the public buildings, we can mention the following which pleased us most:

The public market, a new building of east iron, built by the present mayor is one of the best in the North.

It is a little larger than the Manáos one, but is already becoming unsufficient for Fortaleza, and has the peculiarity, (we don't know if advantageous or incovenient), of being situated right in the centre of the city, and not on a corner as it happens in Manáos, Belém, Recife, Santos, Bello Horizonte, Porto Alegre and other cities.

As to its construction, is perhaps the most artistic of all of them, though not so large as any of them excepting the Manáos one.

The Normal College, inaugurated during the government of Colonel Bezenil, is an elegant two story, modern style building, facing the square from which it is separated by railing and an aristocratic gate.

The Patrocinio Church, a beautiful eatholic church, the front in one single body with a high tower at the centre.

Sagrado Coração church, near the Liberdade park, has also only one centre tower of square basis, in the main body of the front and in Roman style.

Baturité Railway station. It is formed by three different structures, the centre one being a greek portie on four columns.

House of Deputies or Congress. It is a large two story building with a simple form, but not without art and noble aspect.

Cily Hall building, is also a large two story building with six windows and six doors looking and leading to the street in which it is built. A square towerlike elevation with a clock and decorations in the upper part complete the main body of the building, the interior installation of which leaves nothing to be wished for.

The government Palaee, which is also the residence of the governor, as in Rio and in the other States, is a fine building looking to the small square where General Tiburcio's statue is. In its interior it is decorated with good taste and even somewhat luxurious.

The City Hospital is an enormous building with windows all around, with only one floor but well divided and very neat and clean in the interior. It has hygienie improvements which recommend it to public appreciation and praise.

In the centre of Marquez de Herval square, a quite wide square decorated with fine trees and surrounded by fine buildings, are the foundations of an enormous theatre now in the way of construction and which luckily was not finished. We say luckily because never mind how magnificent a building they should put up, it would never be worth the hygiene and esthetics of a city the square that on its account would be closed up. This mistake of obstructing the large city breathers, which are the squares, is a crime that we have seen commited in several cities of Brazil. Luckily they did not finish the theatre so that the beautiful Marquez de Herval square, is destined to be transformed some day into the favorite park of



Fortaleza. - Building of the Municipal Administration

Fortaleza, and is awaiting tranquilly for a mayor who will do with it, what the present one did with the Ferreira square, which is to-day a beautiful garden named Sete de Setembro square.

We will not forget the barracks of the 2nd infantry regiment, one of the best of its kind in the North of Brazil, where is housed only a detachment of soldiers. It belongs to the Federal Government.

The sight that made us feel happy was the Marine Apprentices School installed, however, in a second class building. We were present at several fencing, marching, ship gymnastics and other drills, and we were quite pleased with the degree of technical instruction given to its 170 pupils, who are being prepared, for the navy, by their present director Lieutenant Commander Luiz Lopes da Cruz.

Descending from that establishment, the rear part of which looks to the sea, follows that extensive sandy road that margins the shore with a tramway line leading to the Custom House, a solid stone building always in activity, because, in spite of the bad port, Ceará's commerce gives a good income to the Federal Government.

Among the public gardens of Fortaleza, we must cite the one called Liberdade, a charming spot, with its small lake and thick foliage of its little woods. It looked to us that the park had been some-



Fortaleza. — Gymnastic-room of the Marine Apprentices School

what neglected lately, there were to be seen weeds growing up in its streets and the ornamentation work was a little spoilt. They told us that the municipality having finished the works of the Sete de Setembro Square, was going to direct their attention to that poetic spot named « Liberdade ». They ought to lose no time doing that because that beautiful landscape is worth gold.

In the other angle of the city there is also a public garden laid out in three plans, descending, one after the other towards the sea. It is a pretty little park though more exposed to the dust than the other. Its streets cross one another picturesquely and here and there some marble or bronze goddess fixed on a column, is watching us through the palm fans and over the red roses. One of the prettiest of the streets is the one called Avenida Caio Prado, having in all its length stone benches in the shade of the trees inviting one to rest a little. The vegetation, is live and green even if there is not a great variety of it.

In the city squares there are two statues, the one of General Tiburcio and another of General Sampaio. The former as an artistic work is the best. It represents the hero in bronze, standing, on a square stone basis surrounded by a pretty metallic chain.

One of the curiosities of Fortaleza which the new arrived sees immediately is the numerical superiority of the feminine element.



Fortaleza, - Statue of General Tiburcio

Generally the families are large, and wherever there is a gathering like public festival, the observer will at once notice that there are more ladies than gentlemen present. The periodical emigration explains that, but the city has lost nothing by that so far as its culture and progress are concerned.

The gas, the telephone, the newspapers, the libraries, the several elubs, give to Fortaleza an animated and aristocratic physiognomy, which fits it very well in the role of Capital of the State.

The physical appearance of the people, though the population has not, in the same degree of southern cities, received the crossing of European elements, is, we can affirm, beautiful and noble.

The types of beauty are many, specially among women of white race. They dress with the correctness and elegance peculiar to the

European descendants, cultivate their minds in noted proportions and like the general type of Brazilian women are endowed with the noblest virtues. The prevailing habits and customs have the beautiful austerity of the cities not yet invaded by the cosmopolitanism, abundant both in good and evil.

* *

Public Instruction and Social Culture. — We will now give some information about public instruction:

It is administered by several institutes of learning, both grammar and high schools.



Fortaleza. — Normal College

The Lyecum, just as the National Gymnasium of Rio, has a complete course of the preparatory programme. The Normal College is exclusively devoted to the training of teachers.

The Lyceum in 1903 had 160 students and counting the different classes they frequented the number is 365 entries.

The Normal College had in 1903, year in which we visited that institution, 518 pupils.

Private instruction is administered by the Episcopal Seminary, a college established in Canindé, under the auspices of the monks, another in Estevão mountain (Quixadá) under the Benedietine monks and by many education establishments in the Capital, especially those of Immaculada Conceição, directed by ladies of the S. Vicente de Paulo Congregation, of Nossa Senhora de Lourdes, of Parthenon Cearense, of the Cearense Gymnasium, of the Commercial School and others of smaller importance.

The public instruction at the expense of the State government is furnished free of charge by 256 classes, thus distributed:

In	the	Capital						21
ln	the	cities						83
h	the	villages						82
h	the	smaller	p	lace	i			70

being frequented thus:

${\rm In}$	the	male	sche	ols						71
In	the	fema	le se	hool	s		٠		٠	79
ln	the	male	and	fema	ile	se	hoc	ds		100

The frequentation of students in these schools was during the last five years:

Years			:	Students
1896				9.422
1897				9.956
1898				10.572
1899				10.479
1900				11.505

The public library is in one of the State buildings, and is much frequented.

It has to-day 11.404 volumes, 6.092 are bound and 5.312 with paper cover.

It is open from 9 a. m. till 3 p. m.

Among the literary clubs and societies, which lend to Fortaleza the animation of their work, are the alistituto do Ceará», founded in 1887 and which publishes a magazine known all over the country; a Centro Litterario», publishing another magazine the Iracema, a Padaria Spiritual» which imposed itself with its extravagant name, carried as a triumphant banner, by all talented young men, all over Brazil; a Academia Cearense», which publishes for the last seven years a splendid magazine.

Of the papers published in Ceará we will eite the following:

In the Capital: A Republica, organ of the republican party, daily; — A Revista do Instituto do Ceará, quarterly publication; — Revista da Academia Cearense, monthly; — A Reforma, fortnightly; — A Gazetina, weekly; — Ceara Nu, weekly.

In Baturité: O Oitenta e Nove, organ of the republican party, weekly; — O Municipio, republican paper, weekly.

In Redempção: A Redempção, weekly.

In Maranguape: O Maranguape, weekly.

In Araeaty: O Jaquaribe, weekly.

In Sobral: A Ordem, weekly; — A Cidade, weekly.

In Crato: A Cidade do Crato, weekly.

In Acarahu: A Cidade do Acarahu, weekly.

NAVIGATION, COMMERCIAL AND INDUSTRIAL ACTIVITY. — Once we have spoken of the intellectual activity of Ceará, let us also write something about its material activity, in the domains of commerce, industries and navigation.

There are in the Ceará State besides hundreds of sugar cane, flour and other natural products factories, two cotton mills, the « Ceará Industrial » and « Pompeu & Irmão », one in Aracaty, the other in Sobral. There are also two net factories, in the Capital, both with steam power, three biscuit and mass factories, all in the Capital, two oil factories, one in the Capital, the other in Maranguape, eight cigarettes factories, two of them moved by steam, one ice factory, three soap ones, several distilleries, sugar refineries, umbrella factories, coffee roasting works and caju wine distillery, hat factories, furniture ones and others.

The city of Fortaleza ought to have a quay with apparatus to facilitate its commercial relations. Let us see its export relations statisties:

Official value of goods exported through the port of Fortaleza to foreign countries and ports of the Brazilian Union:

Years				Official value
1895				5.157:556\$495
1894				4.484:434\$481
1895		٠.		6.996:556\$450
1896				5.510.825\$731
1897				7.211:915\$400
1898				11.695:806\$656
1899				10.385:113\$723
1900				11.289:783\$640

The Custom House revenue in the five years previous to the proclamation of Republic was:

Vears					Official value
1885	٠	4	4		1:074:924\$318
1886					1.178:053\$558
1887			٠		1.884:809\$828
1888					1.475:957\$420
1889					1.722:389\$497

In the five years from 1896 to 1900 (though a period of general business depression in Brazil) the Custom House revenue was:

Years					Official value
1896					2.494:797\$550
1897					4.029:762\$063
1898	٠			٠	5.556:467\$590
1899					3.039;635\$840
1900					3.215:642\$663

RAILWAYS, WATER SUPPLY, ETC. — Ceará has the following railways built by the Federal Government:

Baturité Railway, connects the Capital to the city of Humayata, 297 kilometres, rented to the civil engineer Alfredo Novis.

Estrada de Ferro do Sobral, goes from Camocim to the interior of the State, beyond Sobral, 216 kilometres. It is rented to the civil engineer J. T. Saboya e Silva.

In the Capital there are tramways belonging to three enterprizes:



Fortaleza. - Square and station of the Baturité Railway

the Ferro Carril do Ceará, the Ferro Carril do Onteiro, and the Ferro Carril de Porangaba.

Several steamship companies, national and European ones, maintain communications between Fortaleza and external markets.

The State troops consist of an infantry battalion, called — Batallião de Segurança do Ceará — with 23 officers, 348 privates and 12 aids, forming a major-staff, a minor staff, and four companies. There is also a small cavalry company attached to one of the infantry companies.

All the police service of the Capital and in the interior is done by these troops.

THE WATER SUPPLY. — In order to remedy the frequent dry seasons which bring serious consequences to the State, the Government planned the building of an enormous reservoir, called Quixadá, which it is hoped, will render good services to the population.

Unfortunately they have not had the necessary perseverance in an attempt of this kind. When the winter sets in, the claims cease and the government suspends immediately the works, what makes one believe that such work is being done only to give work to the population during the dry season.



Fortaleza. - Caio Prado avenue

The works recommended in June, 1900, had a greater impulse in October of the same year in consequence of an extraordinary credit of 400:000\$000 to aid indirectly the population suffering from the effects of the dry season, and they are still on. While the extraordinary credit lasted, the committee succeeded in employing 1.700 men.

The hydrographic basin is constituted by the valleys of the rivers known as Verde, Caracol, and Satiá which, when joined together were eaught by the central flow.

This flow is about 5 kilometres from the city of Quixadá, which is served by the Baturité railway.

Until to-day the Federal Government has spent on this reservoir nothing less than 3.180:901\$000. There are other reservoirs

started; one in Baturité, the other in Maranguape. None, however, has the proportions of that of Quixadá, which has represented several winters 50 million enbic metres of water.

We had the opportunity of hearing complaints from every one, as to the lack of complementary works for irrigation purposes, without which, they told us, the reservoir will not be able to fulfil its object.

There are in Ceará 80 districts, 29 cities and 52 villages. The judiciary division consists of a «Tribunal da Relação», composed of seven « desembargadores », including the attorney general of the State. There are 31 districts with one judge each, and the Capital two, 72



Fortaleza - Formosa street

judiciary districts, 40 of which are served by substitute judges and 213 police districts.

The Budget of the State has grown gradually, for the last twelve years, the one of 1903 was of about 3.000 contos. The revenue and the expenses of the State are more or less equivalent.

* * *

Punished by the dry seasons, periodically, Ceará sees itself each year abandoned by a great number of its active children, who emigrate to the West and North of the country, earrying the progressive work of their arms to far away places.

In 1877-1879 and in 1888-1889 the emigration from Ceará to the North and South of the country took wonderful proportions, being estimated at 150.000 the number of natives of Ceará who left their native land running away before the calamities of the dry season.

There are no exact notes for correct statistic data on emigration. It can be judged only by the people leaving the port in the Lloyd Brazileiro Steamship Company, which statistics show the following results from 1892 to 1897.

Years	•						To the South,	To the North.
1892.								15 595
1895.							1.795	7.580
1894.							1.489	4.445
1895.							2.089	9.092
1896.							1.894	9.686
1897.							1.787	7.512
			7	lota	ıl.		9.054	51.506

In 1900 a new dry season appeared in the interior of the State and the emigration received new impulse. The Lloyd steamers entered Fortaleza almost without any passengers, and sailed on with hundreds, sometimes over a thousand of those natives of Ceará, driven out by famine, men who worked in the fields, of sound habits, thrifting and hard workers.

During that year sailed on their own account and at the expense of the governments of the Amazon and Pará, 32.062 people and at the expense of the Federal Government 15.773, a total 47.835.

This number does not include hundreds of them who sailed on their own account taking the steamer at Camoeim.

Notwithstanding this, the population of Ceará has not decreased, and the State keeps on its place as one of the most populated States.

A glance at the publications of the Statistics Department, will explain this: Ceará is the part of Brazil where the most beautiful eases of feeundity take place. It is not rare to find there a married eouple with 12, 14 or even 16 children.

Each blow of misfortune is followed by the natural compensation of a new favorable impulse. After the crisis of the dry season, there comes a period of wonderful abundance in which the fields and the woods seem to bloom with earnest efforts with an overproduction of everything. The crops grow enormous, the cattle multiply generously, milk, cheese and butter reach the point of not having quotation in certain points. In the competent departments the registry of births and marriages is such, that in one year only, they registered 206 marriages and about 2000 christenings.

This mysterious rythm of gains and losses constitute the history of all the vitality of Ceará, the resistant and struggling fever of its children.

THE STATES OF RIO GRANDE DO NORTE AND PARAHYBA

The first affidavit of the discovery and the Portuguese dominion in Brazil was the monument erected on the Rio Grande do Norte shore on the place called Bahia Formosa, a small and poetie bay, at the South of Natal city in the district of Canguaretama.

This monument was placed there by the Portuguese Admiral Christovão Jacques in the year 1503.

That stretch of coast of Rio Grande is the mother cell of the Portuguese dominion in America. We will then in a rapid glance, pass in review that sandy shore filled with sinnosities, near the Capital of that State.

The coast of the Rio Grande State participates of the general character of that region: sand, always sand, now in downs and hills, then in infinite plains, and only from place to place interrupted by short stretches of poor vegetation, or some cocoa-nut trees as in Bahia and Pernambuco and a little scarcely towards the North.

Those who come from Rio de Janeiro will appreciate all that landscape, as the most coast steamers always navigate close to the shore with land in sight.

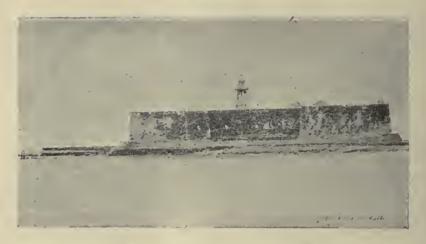
Those going down from Ceará pass near the Cayssara eanal, passing between the island and firm land at the right, quite near as the eanal is narrow. The tiresome panorama continues: enrves and inclined stretches becoming white a little above the water. The sandy shores extend themselves in vast white stretches towards the interior beyond, spotted here and there by some cocoa-nnt trees.

Here we are off Natal, in front but somewhat distant. Unless it is a light draught steamer it eannot go near the shore on that part. In front of the city is an enormous and long rock, which prevents the entry of large steamers. Yet this same rock forms a kind of protection breaking the strength of the sea waves, a kind of natural artificial port affording a tranquil anchorage place, quite calm.

This reminds one much of the port of Recife. At the left of that colossal anchorage, near a seashore place called Moreego (bat) rests the valetudinarian of a fortress that was born with that settlement some 400 years ago and of which the gray shade detaches itself from

the horizon blue bottom, as a sentry, unmovable, firmed in its place by the ice of the centuries. Rocha Pitta's history of Portuguese America says: « It is founded half a league from its port (able to harbor all kinds of ships) at the entrance of which is the Santos Reys fortress, one of the best in Brazil as to situation, firmness, regularity and artillery, built on rocks of enormous size, with four towers. » Thus spoke Rocha Pitta about Natal and its fortress, this survivor of the hard war constructions of the metropolis, which to-day preserves yet the same name of Trez Reis Magos fortress.

They placed on it a light house, with a fixed white light, which can be seen from a distance of 15 leagues. Thus the light of the old fortress which in olden times served the purpose of preventing the navigation, serves now to protect it.



Santos Reis Magos Fortress at the entrance of the Nafal bar

To-day Rio Grande do Norte has about 300,000 inhabitants with 36 municipalities and 36 parishes and a surface of 57,485 square metres.

By the census taken in December 1900 the exact population was 274.317.

The names of the cities and villages of the Rio Grande do Norte State are:

Natal (capital), Maeau, Mossoró, Canguaretama, Parelhas, Maeahyba, Ceará-Mirim, S. José de Mipibù, Jardim, Caieó, Martins, Assú, Apody, Papary, Goyaniuha, Nova Cruz, Angicos, Santa Cruz, Sant'Anna dos Mattos, Triumpho, Acary, Curraes-Novos, Port' Alegre, Caraúbas, Pau dos Ferros, S. Miguel, Serra Negra, Patù, Luiz Gomes, Santo Antonio, Cuitézeiras, S. Gonçalo, Flores, Tou-

ros, Muriú, Potengy, Curimataú, Arez, Taipú, Areia Branea, Penha and other smaller places.

Of all those places, the one that seems destined to a more rapid development is Mossoró, the centre of the prosperous salt industry, which is the principal industry of that region, and the one that brings the largest revenue to the State.

The production of salt in Rio Grande do Sul in the years of 1865 to 1866 was 33.000 algueires, a little over 5.000 tons. In 1903 that



Harbor and City of Natal

production went up to 700.000 alqueires, or over 112.000 tons, nearly all exported to Southern ports.

The Rio Grande Salines occupy enormous stretches of shore and are a wealth much superior to all expectations. That is a just compensation of the local nature, because Rio Grande has not like the other Southern States that mild climate which makes agricultural progress so easy. That State suffers the destruction caused by long summers which dry up the small rivers and burn its valleys. The

dry seasons repeat themselves periodically producing enormous damages to the population and being a drawback to the general progress of the State.

This explains the paralization of certain local industries, among others that of the cultivation of sugar cane, the manufacturing of sugar, brandy etc., so old in the Rio Grande State in which that branch of industry has developed the most. Yet there are quite a lot of old factories which will present quite a large production when there is no dry season.

Recently the Federal Government undertook several public works, as water works, railways, etc. to try to neutralize the effects of that evil.

Fortunately the spot where the Capital is, does not suffer from the bad results of the dry season, having been a good selection even if the port is not of easy access in comparison with the other seaports of the country.

It was Jeronymo Albuquerque who, after an agreement with the inhabitants of Rio-Grande on Christmas day of the year 1597, placed the foundation stone of the first building of the Capital of the State. When that city progressed a little they placed at its head as chief the Conde do Rio Grande and the province was elevated to the rank of Condado. The Count was D. Lopo Furtado de Mendonça the first nobleman with a Brazilian title in the old colony.

* *

The Capital. — Let us east a glance over the Natal city of to-day. The bulk of the constructions in this city follow two different plans: one part extended itself through the lower part and is called Ribeira, the other, called Bairro Alto (upper district) is occupying the upper part of the sandy elevation upon which Jeronymo de Albuquerque had the fancy to settle the city. This sandy mountain has as boundary line the Potengy river, the sea-shore with its sandy ups and downs, which surround it in all its conference, the banks being 21 in number, the city remaining just like an island, with the difference that on one side has the sea, on the other sandy land.

The Capital comprises the following districts: Cidade Alta, Cidade Baixa, Cajupiranga and Ponte Negra, all the parish of Nossa Senhora da Apresentação, having a population of 16.056 inhabitants, being: 7.900 males and 8.156 females. As can be easily seen this city is far from having had a development proportional to its age.

There are some nice buildings in it, as the Palace where the State Congress meets, the Public Instruction Department, in Conceição street, the Charity Hospital, which is also the barracks of the police force in Silva Jardim street, the barracks of the 34th regiment Regular Federal troops, the Marine Appentices school, the Government Savings Bank, and other private buildings belonging to rich merchants.

* *

Public Instruction, Police Force, Railways, etc. — About the public instruction Rio Grande has developed but little as it has done



Natal. - Government Palace

with nearly everything else. There are in the whole State but 92 grammar school classes, while the population is about 300.000 inhabitants. In the Capital there are some high schools among which is the Atheneu Norte Rio Grandense.

The following papers are published in Natal:

Album (published by the literary group Frei Miguelino).

Diario do Natal, daily paper.

Gazeta do Commercio, daily paper, founded on the 1st of October 1901, and is published by an association, having as its editor in chief Mr. Pedro Avelino.

Oasis, the organ of the Gremio Literario.

Tribuna, periodical.

Oito de Setembro, periodical.

The police force is formed by a battalion with 300 privates commanded by a Lieutenant Colonel, the battalion being divided into four companies. It is infantry and they are armed with Comblain guns. They do the police duty of the Capital and interior cities.

As to railway service, all that Rio Grande do Norte has in that line is the Natal to Nova Cruz Railway, built with a guarantee of interest on the capital invested, furnished by the Federal Government and lately rented by the Federal Government from the *Great Western of Brazil Railway*. It runs over 121 kilometres of track.



Natal. - Conceição Street

* *

PRINCIPAL CITIES AND MUNICIPALITIES. — The cities worthy of special mention are among others the ones we are going to refer to, it being understood beforehand that Rio Grande do Norte has no city that ean justly be called worthy of mention.

The most important are; S. José de Mipibû, on the left bank of the Trahiry river, a little above the Papary lake; Maeáo, at the right of the Assu river, in a peninsula formed by the same river, the Manoel Gonçalves strait and the island bay; Assû, at the left side of the Piranhas river; Jardim at the left of the Seridó river, a confluent of the Piranhas river and over 20 leagues above the confluence of Acanhã river with the Seridó one; Mossoró at the left of the

Apody river, to which it gives its name a little above the confluence of the Upanema river with the Mossoró river.

Mossoró. — Is but a small city but promises great future possibilities. It has about 12,000 inhabitants, good and hard working people, peaceful. The city is divided in three political precincts and one parish, Santa Luzia, name of a Saint to be found in a church that has no special characteristic, but that can boast of being the oldest in those regions.



Mossoró. — Seis de Janeira Square

Mossoró devotes itself to the salt industry. It is a pretty and industrious city, and we might consider it the first in the whole State. It is not inferior to the Capital in anything. If it has not political preeminence, it has the superiority of its active commerce, population, industry and buildings. It is 60 leagues away from the Capital and seven from the sea, on the left bank of the Apody, today, Mossoró river.

In Mossoró the following periodicals are published: .f *Idèa*, the organ of the literary elub « Dois de Julho » and *O Mossoróense*, illustrated news paper, published twice a month.

Touros. — Among the four cities of 13,000 inhabitants, that the last census exhibited disputing with the Capital of the State the record of the density of population in the Rio Grande do Norte, this city of Touros (Bulls) in spite of its name is one of the most sympathic though it is not the most progressive.

CEARA-MERIM. - It is a well built city, with fine buildings, as

are: the Jail, the Atheneum, the City Hall, the Market, the Cemetery and the Church which the principal one having no rival in this State and that of Parahyba, having its equal in the church of Penha, in Pernambueo, which is small in the length though larger in width.

There are also some nice private buildings. There are yet three squares named — Alegria, Mercado, and Matriz. This last one is ample and with trees and in it is the church and the Atheneum. The market is small, but neat and clean. There are 50 streets only one of which is paved. There are two districts — Ribeira and Cidade Alta.

Compared with its territory, the State of Rio Grande do Norte, is one of the States that has the longest coast extension, having three



Mossoró. — Flores Street

ports for its external commerce, Natal, Mossoró and Maean, though all of them are of difficult access.

All the imaginable wealth of the forest, of the soil, of the rivers and of the sea-shores are in Rio Grande do Norte waiting for the European arm, the immigrant and the capital, to develop, to raise the fortune and the progress of that region. On the other hand the climate is excellent, there are no epidemic diseases nor any evils that may shake the proverbial quietness of those people.



The Rio Grande do Norte, as the neighboring States, is periodically subject to dry seasons, «Several times» — says a writer — has ravaged over the Apody river and all the far interior of the State the terrible phenomenon of the dry seasons, the following

having been the most dreadful: they are those of 1607, 1692, 1710-1711, 1723-1724, which were extended from Bahia to Ceará, those of 1736-1738, 1744-1745, 1777-1778, in which the cattle of the State was reduced to the eighth part, and that of 1790-1793 called the great dry season.

The same way that in Ceará, whose nature is analogous to that of this State, once the dry season period passes, there comes a period of compensative abundance. It is abundance and fortune without measure.

The principal products of the State are: corn, beans, mandioca flour, eotton, sugar, skins, butter, vegetables, oils, rozin, earnauba, honey, brandy and building lumber.



Mossoró. - Da Matriz church and Square

In those Rio Grande hills and mountains they have discovered vestiges of the existence of several kinds of minerals such as: iron, sulphur. saltpetre, chalk, and different stones. In one of the corners of the Itahu lake, or of the Apody near the mountain of the same name, has been seen for these last few years, a large quantity of a betuminous and inflammable substance, which produces a light similar to the carnauba wax. They say that at leagues distance from the city there is a layer, where, among other curiosities a kind of crystal can be seen. We read about it that « the ground of this layer and its neighborhood is a kind reddish blue clay which exposed to the fire and diluted in water, becomes line and soft so as to be moulded in any shape for the manufacture of crockery. This reddish blue soil is naturally cleaved in many places where a kind of light and very

fine matter can be seen, that looks like looking-glass steel and which is awful hard to gather ».

As to water, there are several mineral water springs which have not as yet been analysed. The best known of these are the aguas ferreas (iron waters). The use of these is good, generally, for the diseases that require iron preparations.

* *

Rio Grande do Norte as to its manufacturing industries is just as backwards as Piauhy and Goyaz are. Worthy of mention there is only in its territory: a good cotton mill in the Capital; a soap factory and a saw mill next to it in a place known as Refoles; a printing office, engraving shop and book-bindery in the Capital; and a eigar factory also in the Capital.

Its exports are still inferior to those of Piauhy notwithstanding the fact of having three ports to communicate with the exterior, or may be that, because of that, the volume of its external commerce is so small, as one can see by the figures of the movement during the first eleven months of 1901:

But, we must not despair as to the future of the progress and wealth of this beautiful region. This territory has elements, every element of prosperity, by the varied producing capacity of its valleys, its most superb mountains as Borburema, João do Valle, Luiz Gomes and others. Railways and European blood is what Rio Grande do Norte lacks to develop its latent wealth and prosperity.

THE STATE OF PARAHYBA

Sailing from Reeife in the evening, we soon bid farewell to the two light houses: Santo Agostinho (a large unmovable white light) and Pieão (changeable light white and red), and we awake in sight of Cabedello the sea-port of Parahyba, capital of the State of the same name.

The shore continues covered with trees and right there at the entrance of Cabedello there is an extensive plantation of Bahia Cocoa-nut trees. There is also a light house. Built on a low plane

which in the high tide presents a curious spectacle: an iron tower, high and solid without any basis in sight but the moving waves. It is the Pedra Seeea light house.

Cabedello is an old village without any other importance but the one lent to it by the eirenmstance of being the landing place of the State. It is eonneeted with the Capital by a railway. 'A wooden bridge dock is there for the ships to come alongside.

* *

The road, of narrow track, goes through the woods describing curves, in an inclination sometimes quite steep, as Parahyba is quite away up and there are only 18 kilometres separating it from Cabedello.



Parahyba. - Das Mercès church and street

The Capital is a small historical city, a poor one and as old as it is modest. It was built on the 5th of August 1585 by the Portuguese. Oh!... 1585... How well we can see that by the first buildings, which we see as we reach the city. Its name is Parahyba, the name of the river that bathes its territory and must have some 180.000 inhabitants. It was once called Frederikstad (Frederic city) while it was under the Dutch conquest. At another time during the same period it was also called Felipéa, in honor of Felipe who reigned over the Spaniards when these latter dominated the Portuguese.

Even to-day Parahyba is a small city divided in two halves quite unequal: one margins the anchorage at the river level, full of commercial storage houses etc., and its name is Varadoiro, the other going up-hill and ending on the top of the mountains wherefrom a

beautiful panorama is displayed before our eyes: mountains green as they can be, enormous clay-pits, chimneys letting out a light white smoke from the sugar factories, spread here and there, nice small houses of delicious snow-white, and connecting this heterogeneous mass as a conducting wire, the Parahyba river runs, making the contour of the reliefs, without waves, without noise until it loses itself in the hesitating gray of the horizon.

The inclined street that connects the two districts, has at its right the Europe Hotel, a grim and dirty looking large building, and leads to another cleaner street ealled Barão da Passagem, which runs straight lined by nice houses, following yet another one ealled Rna Nova and existing since 1634, the buildings, however, seeming to confirm the new name of the street. Walking a little further we



Parabyba. - Old convent of S. Francisco

are on the top of the main hill, where fine houses have been built. There is the old Church, a large temple devoted to Nossa Senhora das Neves, which is the eathedral to-day.

This ehurch was built away back in 1635 and the S. Francisco convent, with its large church that has a characteristic front. Of the religious constructions this one is the best in Parahyba. It has a spacious nave, at the sides dressed with mosaic, the entrance however is of a more modern style, and in the centre there is o cross-aisle of iberic marble, a curious feature. Even in the interior the church is worth looking at, as it is the Ordem Terceira Chapel which was afterwards annexed to it.

When the Dutch took possession of the city they fortified this convent and made of it the Governor's residence.

To-day, having lost its monks, they made of the convent a school which is frequented by 200 boys who make their preparatory studies to enter the different Colleges and Universities.

If we take the tramway that goes to the beautiful suburb of Trineheira where the extreme end of the city confounds itself with the woods, we go through a pretty square with a beautiful garden protected by iron railing.

In front of this garden there is another construction with the charecteristics of respectability. It is an old convent and its church with a tower of undefined color, which is the color of the centuries.

To-day the old building has an official function, being the governor's palace.



Parahyba. - The governor's palace.

At the side of the church, is the Parahybano Lyceum where there are quite a number of classes in the two floors of the building.

The best buildings are in the upper part of the city, but, in a rustic style square occupyng more or less the middle plan between the two cities, are the largest ones: the Post office, of fair size; at the right, the theatre and in front of the Post Office the police barracks a large two story building. The Italian Benificent Association building, followed by a row of small houses close the square, which has the name of Bento da Gama. The Treasury a good solid building is also in this square.

* *

Industry, Transportation, Public Instruction. — The principal industry of this State is the cultivation of sugar-cane, sugar manufacture, alcohol, etc. The number of sugar-cane farms and fac-

tories is 209, working most of them by old processes. There are, however, some important factories: a cotton mill, two cotton shelling, fine eigars, one oil and one ciment, bricks and mosaic factories, etc.

Regarding the mineralogical wealth of Parahyba, the experts speak most highly. They say that the underground of this region has extensive layers of coal, rich copper, lead, iron, gold and silver mines, important feldspars and precious stones.

We can say about this State what can be said with all safety about the balance of the country — it is most wealthy. It is most wealthy but all the wealth and all the variety of its minerals remain tranquil in its layers, where from nobody seems tempted to lift them.



Parahyba. — Fiscal Delegation

As yet, what is being developed is the agriculture, and a little the dairy industry. The ground, in Parabyba is generally fertile and adapted to all kinds of cultivation, and above all: mandioca, corn, rice, beans, tobacco, sugar-cane and cotton.

The sugar-cane and cotton furnish the largest part of the State revenue.

« The development of coffee and wheat cultivation, as well as the extraction of rubber from the manicoba and mangabeira trees, are expontaneous products of the soil, and will in the future be a rich source of public wealth.

The topographical position of the State, the large extension of its elay-pits and the lack of railways to connect the agricultural region, favor a good deal, in spite of all the zeal of the fiscalisation, the exit of a great part of the agricultural products of the State to the neighboring ones, appearing in the export statistics of the latter as production of their own. »

The railway of the State is called Estrada de Ferro Conde d'Eu with a capital of 6.000;000\$000 with a guarantee of 7 °/ $_{o}$ interest and £ 69.273 with a guarantee of 6 °/ $_{o}$ interest. This road connects Parahyba with the neighboring States.

The principal line, from Cabedello to Guarabira, is 116 kilometres and the branch that goes from Entroncamento to Pilar measures 25 kilometres.

It was rented by the government to the enterprize who built and inaugurated it in 1883.

This railway with its branches has the following extension of trafic:

		kilometres
Mainline (Parahyba to Mulungu)		76.000
Branch (Pilar to Independencia		47.000
Prolongation (Parahyba to Cabedello) .		18.000
Branch (Mulungii to Alagoa Grande)		24.000
Total.		165,000

We said above that sugar-cane was the principal cultivation of the Parahyba State. We had better said it is the sugar-cane because since colonial times they have never tried any other. When the Dutch denominated this region Parahyba, they gave it as coat of arms three sugar loaves. That was the idea of that talented Prince of Nassau (whose beneficial dominion over that part of the country, it is a pity, was not prolonged), who in that way wanted to express the superiority of that product of Parahyba above all the other similar product all over the world. To-day, with its primitive processes, with the humble large copper pots it cannot prevent that even in Brazil that superiority will go over to other States who have adopted the modern manufacturing processes.

And its three-sugar-loaves coat-of-arms signifies nothing else but a beautiful historical allegory.

Yet, even with the decadence of a great industry, Parahyba succeeded in nine months, in 1903, to reach the following figures:

Exports.		٠			1.534:779\$600
imports.					1.547:761\$090

In proportion to the conditions of the State, the dairy industry, in its different branches, is important, contributing with about one third of the State revenue.

At intervals it is greatly diminished by the periodic dry seasons, beginning a new and prospering period when the regular winters appear furnishing with its abundant production the neighboring State of Pernambueo.

The public instruction is administered by 162 elasses with a frequentation of 4.000 students.

There are also in the Capital: a Normal School which is devoted to the training of teachers and the high school — Lyceu Parahybano — having the same rights as the National Gymnasium by decree 2001 of 1st. July, 1896. There are also the Model School and Marine Apprentices schools as well as a Public Library.

The military force is constituted by a Safety Battalion with 200 men commanded by a Lieutenant-Colonel.

The telephonic and telegraphie nets connect with Mamanguape, Arcia, Lerraria, Bananciros, Alagôa Grande, Alagôa Nova and Campina with an extension of 250 kilometres.

OTHER CITIES OF THE STATE. — Besides Parahyba there are other eities worth mention, though all of them are cities of third or fourth order. As yet they are small nucleus, destined to appear later on in the list of the fine Brazilian eities, when the railway will afford them the miraeulous vitality of their services, bringing them nearer the Capital, connecting them with the outside markets.

Here are some of those small cities:

AREIA. — It is beautiful and well built, situated on one of Borburema hills, 25 leagues away from the Capital, 700 metres above the sea level, a region with an European elimate; its streets are paved, some of them inclined but very neat, buildings of modern style, and pleasing aspect. It has a cathedral and another church, an hospital, a theatre, a garden, a public square and the jail.

A part of the municipality is devoted to eattle raising, the other to agriculture with fertile fields, irrigated by little rivers. It constitutes the most powerful centre of sugar-cane cultivation in the interior of the State, counting more than 80 sugar factories. Its principal places are: Lagôa do Remigio and Matta Limpa. In that city were born Aurelio de Figueiredo and Pedro Americo, two notabilities of the artistic world.

Mamanguape. — A city, seven miles away from the sea and 12 away from the Capital crossed by a little river where boats navigate.

It has two churches, a jail, and some pretty private houses. It has a Treasury and Telegraph station. Its commerce is mainly with the market of Recife.

On the way from the Capital to Mamanguape there are vast tracts

of mangabeiras, trees where rubber is extracted from. They say there is a large calcareous cave, which is one of the finest things worth looking at.

There are many sugar factories and they cultivate grain, tobacco, mandioca, and sugar-cane.

ITABAYANNA. — It is situated at the right of the Parahyba river, 15 leagues from the Capital and 66 metres above the level of the sea.

It produces corn, mandioca and cotton, they manufacture cheese butter and prepare dried salted beef, which is sold principally in the neighboring State of Pernambuco.

CAJAZEIRAS. — This city is situated 112 leagues at the west of the Capital and has 9.000 inhabitants.

For its commercial activity and prosperity is considered one of the principal cities of the State. Its soil is adapted to the cultivation of grain, tobacco and specially cotton.

This Parahyba State has ten citics: Parahyba (capital), Mamanguape, Guarabira, Itabayanna, Bananciras, Campina Grande, Areia, Pombal, Souza and Cajazeiras.

There are thirty five municipalities: the Capital, Santa Rita, Espirito Santo, Pedras de Fogo, Mamanguape, Guarabira, Pilar, Areia, Serraria, Alagôa Grande, Itabayanna, Campina Grande, Natuba, Ingá, Cuité, Araruna, Soledade, S. João, Cabaceiras, Batalhão, Pombal, Catolé do Rocha, Brejo da Cruz, Pianeó, Conceição, Misericordia, Princeza, Patos, Santa Luzia do Sabugy, Teixeira, Alagôa do Monteiro, Souza, S. João do Rio do Peixe, Cajazeiras and S. José de Piranhas.

Sixteen districts: Capital, Mamanguape, Itabayanna, Guarabira, Bananciras, Arcia, Campina Grande, Alagôa do Monteiro, Catolé do Rocha, Pombal, S. João, Piancó, Patos, Souza, Borburema and Princeza.

THE STATE OF PERNAMBUCO

The Capital of Pernambueo about which we are going to write now is one of the most important sea-shore cities. It is the fourth as to its size, population and activity, of all Brazilian cities. Those preceding it being Rio de Janeiro, São Paulo and Bahia.

There is a ridge running parallel to the city in the sea, in the form of a majestic and solid reef and it was that what very properly

gave it the name of Reeife. The census of 1900 gave it a population of 113,000 inhabitants.

Few fancies of the prodigious nature of Brazil are comparable with the imposing and curious form of that platonic rock, placed as a break-water, a long strong wall against which the waves with all their fury doesn't succeed but in transforming in foam the water stream, all that portion of sea beats against it.

What there is of artificial work in that break-water was the work of the Dutch, those celebrated collaborators of the sea, already clever in the conquering science at that time. To crown their work they placed at its extreme end, a few metres above the sea level, a



Recife. - Interior anchorage and the natural reef.

strong tower to be used as a light-house and which can be seen at 20 miles distance.

Seen from a great distance, the city seems buried in the water, we might say it looks like a large, marshy village, half floating, half sunk, where we can discern the church towers, the factory chimneys and the Navy Yard tower. It is that scene that the great Brazilian poet wanted to impress in these verses:

Salve! terra formosa, oh! Pernambuco, Veneza americana, Iransportada Boiante sobre as aguas!

Hail! beautiful land, oh! Pernambuco. American Venice, transported floating on the seas!

An impression of the first visit to the city is expressed in the following paragraph of a true observer:

« Those who on board of a transatlantic steamer, arrive for the first time at Pernambuco have the impression that the city of Recife raises itself from the sea growing larger and more beautiful at the proportion we grow nearer.

This illusion, known by all those who have entered Recife by sea, though produced by an effect of optics, is however based on a true fact: the city of Recife, was, really in its greatest part, conquered from the sea.

Those districts of the city full of movement, as the Recife (S. Frei Pedro Gonçalves), Santo Antonio and S. Jose, and a good part of Boa-vista where places largely covered by marshy ground which the high-tides fed and the human work conquered by means of quays and filling in the ground, in order to architect the city of to-day which is already a beautiful city, but has all the elements to become still much nicer. »

So that the city area is nothing else but a series of small peninsulas and eanals — happening that the oldest one of the districts, is positively an island. All this, however, connected, embodied by means of viaducts, built with more or less elegance over the murmuring, bright and reflecting rivers.

This peculiarity, proportionating to the Recife, the most poetic and unforeseen panoramas, was the cause of it having received the popular name of Brazilian Venice.

Its geographical position, on the other hand, having impressed on it an undisputable preeminence, assures for it also an auspicious future, on the day that its port shall become a forced point for international navigation to touch on its way abroad as the shortest route between the European Continent and Brazil.

Elisée Reclus, with all the weight of his authority said: « It is one of the commercial emporiums which seem destined to a great future. »

It is said that it was founded in 1536 by Duarte Coelho. Later on in the seventeenth century it was embellished by Maurice of Nassau, a Dutchman, who instituted it the seat of the Dutch dominion when they treated of the occupation of those conquerors in Pernambuco.

Its port is then divided by the natural reef. The space between this reef and the city is called Lingueta, and only ships of middle draught can anchor there. The ships of deep draught remain beyond the reef. That anchorage is not sheltered and they call it Lamarão. When the government will realize any of the existing projects, (there is a French one, Fournié and an English one, Hawkshaw), for the improvement of the port, Recife will become a city of capital importance, because, as E. Reclus said: « No point on the Brazilian coast has more importance from a strategic point of view. It is the advance point of the Republic and of all the Latin American New World, for that matter. It will not be long in the future, when ways of direct communication will allow the line to the commerce to become shorter and Pernambuco will be the most frequented port of all South America. »



Recife. - View of Primeiro de Março street

But we have said enough about the port. Our reader, to be sure, wants some notes on the city of to-day. We will please him. What is there in Reeife to-day?... Everything that goes to make a large capital: railways, tramways, hotels, theatres, arsenals, superb churches, Academies, libraries, newspapers, clubs, factories, nice residences, in all the islands and suburbs, a constant movement in the streets, a joyful agitation of the active working classes, here we have the Recife of to-day.

Let us see the principal sections of the city:

The Recife prosperity, and that of Santo Antonio, from the purely

esthetic point of view are not up to the district of Boa-Vista, and the new suburbs. But, as in everything there is the law of compensations, they have a constant animation and splendid business houses displaying charming show-cases and windows. The streest are uneven, quite so. If we see some wide and straight streets as Barão de Victoria, Imperatriz and a few others, which give a nice impression to the visitor, we see many others narrow, tortuous, regular lanes, lined with three and four story buildings, Portuguese



Recife. — Estação da E. P. de Carnaru

style with plain walls only disturbed in their simplicity by the modest verandahs and windows. The monotony of the constructions in these districts, are just like those of Bahia and Pará, of all those places where the commerce has Portuguese roots and virtues.

Just where we land, in the business district, is the building of the Commercial Association. It is a fine building, though without architectural style. It is situated in a place of the Lingueta which was conquered from the sea, a stretch that is prolonged as quay forming a pretty and pleasant boulevard. This building has two floors, has a library, a reading room with newspapers and magazines, which is much frequented, and above these is the meeting hall with the pictures of men, who have rendered services to the commerce, hanging from the walls. When we were there the president of the Association was Dr. Corbiniano da Fonseca Filho, an industrial who has a large soap and caudle factory in the Blum district.

A little further ahead we see the pretty street called Cadeia which prolongs itself over a bridge called Recife, paved with stone blocks, and wooden sidewalk on both sides; the centre for carriages and trucks, the sidewalks for footpads. Two stone arches of peculiar ornamentation give access to the extremities of this viaduet, one is called Santo Antonio, the other Conecição.

Following, always in straight line, another street of magnificent perspective is seen. It is the Dois de Março street, also lined with large buildings two and three story high. The ground floors are oeupied by stores, whose show windows and signs of all colors and dimentions lend to that artery of the city an European stamp.

Crossing this street perpendicularly runs Imperador street, a wide one ventilated by the fresh breeze with fine buildings on both sides.

The aspect of that avenue is rigorously modern, not only by the buildings but by the movement of people and vehicles of all kinds, by its active commerce, by its brasseries filled with people, the beautiful fashion establishments with the display of a world of fine laces, feathers and other pretty futilities.

The pretty street Barão da Victoria, we referred to above has also its continuation over a bridge, which is named Bôa Vista, from which looking to the portions of the city on the river side we enjoy a landscape that ean't easily be forgotten.

Beautiful panoramas they are those we can contemplate from those bridges! We see that the Capiberibe river returns as a new looking-glass does, the image and the coloring of all the buildings stooping over its banks. The large buildings of the city, thanks to the strange topographical arrangement of Recife are lining the rivers.

One of them, which we visited only owing to that circumstance was the House of Detention (the jail) built by the civil engineer José Manoel Alves Ferreira.

Leaving that section of the beautiful city running in another direction we run accross a typical iron and glass building. It is the S. José Market. Two enormous pavilions with their red roofs connected by a central gallery. Inside, bathed by the irradiation of the sun, which penetrates by all sides, there moves in all directions like

busy bees a thick crowd of men and women, young and old, even boys and girls, and the grain, the vegetables, the beautiful tropical fruit, everywhere, complete the picture of the large building. There is another market, superior to this one in architectural style. It is called the *Derby*.

* *

Now we are before a church. Let us look at it, dear reader.

It is one of the most beautiful in Brazil, though it is not so imposing and so large as Candelaria, in Rio de Janeiro is, nor of so severe grandeur as the Collegio church of Bahia, nor of so elegant



Recife. - The market of Derby

architecture in its exterior as the Bello Horizonte and Curytiba cathedrals, nor so majestic in its height as the Nossa Senhora das Dores church of Porto Alegre, nor of so patient interior decoration as the historical S. Francisco church of Bahia. It is, however, most worthy of the fame it enjoys for its harmonious architectural style, based on the corynthian order in which every part of the church is moulded, from the simple front, in which predominates an italian taste, till the elegant dome of the spheric section, ending at the top by an open lantern with a monumental image of Our Lady.

Another church of those 43 in the city, which pleased us a good deal was the Boa Vista, unfortunately situated in a place that is not favorable to its perspective. It has a stone front in two bodies, one over the other, each one with its columns and two square towers

some 50 metres high. The whole structure presents a noble appearance with many ornamental accessories which do not diminish its majestic aspect.

We will now write about the Santa Izabel theatre which is one of the fine buildings of the city, one of the best of Brazil, though of modest proportions. It is not as rich in its interior as the Manáos theatre, and hasn't much less the architectural perfection in its exterior that the Belem theatre has, yet, it is a most pretty building and well worthy of the praises all visitors are prompt to make. The central



Recife. - Suburb of Recife and Sete de Setembro Bridge

body of the building in the form of parallelogram is somewhat imposing on the outside, with two rows of windows having above them two rows of windows, (like ships port-holes), remind one even of a large transatlantic steamer. Two different bodies complete the whole, annexed to the two smaller angles, the front one being decorated with a portico and a terrace with columns.

It was built by the French architect L. Vauthier and inaugurated on the 18th of May 1850. Devoured by a fire in September 1869 it was re-erected by a builder José Augusto de Araujo, under the direction of the public works engineer Dr. José Tiburcio Pereira de Magalhães, and it was reopened on the 16th of December 1876.

In the rebuilding the primitive plan of the building was enlarged and has a sitting capacity for 1.000 persons.

There is in Reeife another theatre, that of the Club Dramatico, belonging to a private association, with a sitting capacity for 600.

In the same square where the Santa Isabel theatre is to be found, there is the Governor's palace in the other angle. This palace is both the State Government seat and the Governor's residence, and is shaded by tall palm trees. As to its architecture this palace has nothing



Recife. - Nossa Senhora da Penha church

worth while noting, it looks a little like the Pará State one, though not so large and not so pretty. It has, however, an historical interest, as it was erected on the foundations of the Prince of Nassau's palace. At present, after successive reforms, it has the external appearance of an old mansion residence of noble personages. It has two floors in three of the angles of the building, in the fourth angle, at the rear there are three floors and there is the Governor's residence. The front is painted of dark red, with a triangle in the centre at the top and faces the garden of the Republica Square.

This is the finest square of the city. Recife in this regard did

not keep in pace with its importance and grandeur. It has but few squares, and those it has, have quite poor gardens. You may run through the whole city and you will not find one of those pretty parks as you find in Belem, São Paulo, and Rio de Janeiro, perfuming the atmosphere with the balsamie sweet scent of their flowers.

Another important building is the Congress Palace, modern style with a semi-spherie dome, the shade of which projects itself in the looking glass of the river calm waters, as a large and trembling image.

It is a fine building, the foundation stone of which was placed on the 2nd of December 1870, and was finished on the 20th of January 1876, under the direction and according to the plans of the civil engineer Dr. José Tiburcio Pereira de Magalhães.

A little further ahead, also in the pretty street that lines the river we see a large building, the Gymnasium, possessing in its large size what lacks in elegance.

At the end of the Imperador street is a white three story high mansion, of sober architecture — it is the Town Hall. — The municipality does not occupy the whole building. The second floor is the public library which has nothing to do with the municipal service.

We visited it with leisure and with all this patient crankness that makes of us a library-maniac. Everything was in perfect order. The books of which there are 20.000 volumes were in book-cases with glass-doors, quite protected from the dust and leaning against the walls, according to the usages in olden times libraries. The books were nicely kept. The catalogue is nicely arranged.

* *

Without feeling it we started treating public instruction subjects and as it deserves a separate chapter we now open it.

The oldest and most respected institution in this line is the Law College. Not having that famous reputation for its glorious traditious, nobody will say by looking at this establishment, that this building is the nest and nursery wherefrom so many intellectual eagles have raised its flight earrying the beneficial influx of their knowledge to every corner of Brazil.

The Arts and Trades Lyceum is a most sympathetic institute of learning. It owes its existence to private initiative and its expenses are made by the product of subscriptions of private contributions. It has a building of its own, and a fine construction it is, with

elasses where languages, sciences, arts and trades, industrial drawing and other studies are taught free of charge both in day and evening classes. We were there a couple of hours examining some curious anthropological, archeological and numismatic collections which form its interesting museum.

This popular institute, based on the system of the establishments of its kind in Bahia and Rio de Janeiro, was founded by the «Sociedade dos Artistas Mechanicos e Liberaes», in the year 1881, the State Government contributing with a yearly subsidy.

The Archeological Institute has a reputation which has already reached beyond the State] boundary limits, it has spread all over the



Recife. - Legislative Congress and Gynmasium buildings.

country. It is in a small building of a most peculiar architecture, in which curve lines predominate, built at first for grammar schools and later on reserved for this institution.

In the meetings Hall we saw a picture gallery with the portraits of historical personages, and notabilities of the ex-province.

CHARITIES DEPARTMENT. — The public buildings devoted to the service of public aid in Pernambuco are worthy of note.

The D. Pedro II Hospital is the largest. It is a large three story building — it is the city hospital.

The foundation stone of the building was placed on the 25th of March 1847 and before it was finished on the 10th of March 1861 began already its charitable work of receiving patients to be treated.

It has nine wards for men and four for women, steam washing

machinery, a chapel, flower and vegetable gardens, observation rooms for suspected diseases, livery stables, laboratories and every department needed in an institute of its kind.

The Insane Asylum though not as important as that of Pará, or that of São Paulo, is yet one of the best in the whole country.

The building is a modern one, situated at the Tamarindeira Square, a most pleasant and healthy spot. It has four pavilions, the central one being 145 metres away from the public road, and is occupied by the administration of the institution, measuring 30 m. 50 front by 22 m. 00 depth. The other two pavilions, are devoted to the habitation of the insane, and have their fronts a little further ahead than the central one and measure 30 m. 50 front by 50 m. 00 depth.



Recife. - Insane Asylum

The main front is of doric style and of Lisbon stone with a stairway, a portico and a garden in front.

When we visited this noted asylum in October 1902 there were 42 insane patients from Pernambueo and neighboring States.

Just as the Insane Asylum, the Poor House, known as the Asylo de Mendicidade, is another document of the high interest that the Government of Pernambueo takes in the public aid services of its Capital.

There are yet in Reeife the asylums and hospitals, Magalhães Bastos, Lazaros, Santa Angela and others.

Public Instruction. — Incidentally we have already spoken of some public instruction establishments, as the Gymnasium and the Lyceum. We will now write about the grammar schools. The different municipalities of Pernambueo share with the State Government

the charges of public instruction. Just as it is done in Bahia, Minas, São Paulo, and other States.

The State maintains in its capital, Recife, 16 grammar schools, two in each ward — being one for each sex.

. The municipality in its turn supports 108 day schools and eight night ones. There are also about 30 private schools.

Public schools in the State of Pernambuco.

In the capital:

There are, besides this, many private schools, both grammar and high schools spread through the cities and villages of the interior. The State government has also the Colonia Orphanologica Isabel, (« Isabel » orphanological colony), an important institute for orphan children.

There are in Recife several libraries, the principal ones being: à Bibliotheea do Estado; Bibliotheea da Faculdade de Direito; Bibliotheea do Gabinete Portuguez de Leitura; Bibliotheea do Instituto Archeologico.

Nearly all the principal associations and learning institutions maintain libraries of more or less importance.

The State Library has 30.000 volumes, the Gabinete Portuguez one 20.000; the Faculdade de Direito one 10.000, and that of the Archeological Institute 3.000 volumes.

As to secondary and superior instruction there are also the following classes:

«Associação dos Empregados do Commercio» niglit classes of languages and other studies for book-keeping and commercial pursuits.

Normal College, — with a a four year course for teachers. There is another school of this kind for the same purposes maintained by a private association.

Engeneering College, founded by Dr. Barbosa Lima while Governor of the State, installed in a fine building, modern style, with a physics and chemistry cabinet and laboratory.

We must not close the Pernambueo section without writing about the magnificent press of its Capital. It is the State where journalism is the strongest and most advanced. In the Capital alone there are eight dailies, and some have won a reputation in all Brazil, such as the Jornal do Recife published for the last 43 years; the Diario de Pernambuco, published since 1825; the Provincia; the Estado; the Correio do Recife; o Jornal Pequeno, etc. In the interior we rarely find a city of some importance without a newspaper.

* *

Industry and Commerce. — In spite of the largest part of Pernambuco's activity and wealth being trained towards agricultural industries, just as it happens in nearly every State of Brazil, it would be a mistake to imagine that there is not either in the Capital or in other cities, an ever growing number of factories.



Recife. - Compressing cotton works of V. Neesen et Co

Speaking only of important establishments there are in Recife and suburbs the following factories: 3 shoe ones, 6 cotton mills, 1 oakum, 26 cigars, 2 playing eards, 1 glassware, 2 hats, 1 matches, 2 perfumery, 1 powder, 6 soap, 10 furniture, 3 oil, 4 candles, 2 gloves, 2 bones coal, 7 picture frames and looking glasses, 1 ice, 1 neckties, 1 paste board, 1 biscuits, 1 wire nails, 1 cement, 1 brick, 3 tomato mass factories and 12 breweries and liquor distillers.

As to its *mater* industry, the manufacture of sugar, the State not long ago invested 14.000:0\$00000 to enlarge the installation of some factories and introduce new processes in the preparation of sugar.

In the State of Pernambueo there are to-day 38 steam and

hydraulie sugar factories, and 1.600 sugar factories working by the old processes, which give an average of 150.000 tons of sugar each erop.

The total of the annual production of sugar-cane is estimated at nearly 3.000.000 tons.

To-day none of the Brazilian States produces better qualities of sugar nor cheaper ones than Pernambuco.

On the other hand, its producing energy is astounding. The following table of sugar export by the port of Recife serves as a proof of the statements we made above.

MAP OF THE SUGAR PRODUCED IN PERNAMBUCO IN 7 YEARS 1894-1901 (IN BAGS OF 75 KILOS)

мойтнг	1894-1895	1895-1898	1896-1897	1897-1898	1898-1899	1899-1900	1900-1901
September	54.520	13.542	19.090	12.285	15.875	17.962	7.450
October	251.042	78.258	104.200	117.445	146.546	153.711	92.250
November	405.483	238.784	259.481	279.944	295.452	511.549	276.653
December	449.128	249.550	266.166	291.129	272.211	354.667	286.842
January	494.416	347.639	285.737	206.484	241.817	284.828	354.286
February	332,302	571.950	219.288	242.698	191.058	221.736	295.160
March	502.680	336.799	148.981	226.720	127.025	189.617	218.729
April	206.975	190.593	97.871	122.755	84.847	98.612	158.739
Мау	144.623	116.728	47.599	116.413	60.672	67.157	121.253
June	86.956	75.975	24.521	55.927	19.148	21.191	68,510
July	39.310	55.542	11.118	19.565	7.297	6.983	47.800
August	9.782	9.428	6.254	7.268	3.152	5.013	36.35
	2.777.415	2.062.568	1.488.106	1.758.421	1.461.980	1.712.826	1.974.01

It isn't sngar alone that appears in the list of Pernambuco exports, there is also cotton, dried and salted skins, alcohol, brandy, oils, carnaiba, mamona (of which easter oil is made), and rubber. All these articles are exported in smaller or larger quantities.

The production of cotton, for instance, which is the second article in importance in the list as to quantity is quite large and the table below representing the port of Recife exports of that article in the decade 1891 to 1901 will give us an idea of it:

Years					Bales	Vears				Bales
1891 a 1892					167.999	1896 a 1897				169.867
1892 a 1895		٠		٠	512.112	1897 a 1898				240.572
1895 a 1894		٠	٠		312.238	1898 a 1899				135,579
1894 a 1895					195.667	1899 a 1900				289.826
1895 a 1896					172.427	1900 a 1901				558.925

The importation commerce of Pernambuco is large, exceeds even

its exports, what is easily explained because the port of Recife is a kind of intermediary of the imports of some of the small neighboring States.

In 1903 the international interchange of Pernambueo from January to November was:

By the following list we will see that Pernambuco occupies a prominent place, being second to none but Rio de Janeiro as to the amount of its imports among the six States which import more than they export. By the last official statistics data during the first nine months of 1901 we see that those states imported:

 Federal Capital
 156.711:851\$000

 Pernambuco
 34.194:821\$000

 Rio Grande do Sul
 20.198:226\$000

 Maranhão
 4.329:584\$000

 Parahyba
 1.547:771\$000

 Sergipe
 350:619\$000

The port of Recife is one of the principal ones of Brazil, as to the entry and sailings movement in spite even of nothing having been done materially to adapt this port to the requirements of modern commerce. A committee of engineers which the Federal Government maintains there, and installed to-day in the old Navy arsenal building, has made some dredging work in the port between the Lingueta and the light house to clear up the channel.

* *

Police force, transportation, etc. — The police force of Pernambuco, which used to have 2.000 men, was lately reduced.

The map showing the expenses made with the State troops, during the year 1903-1904 go up to 852:300\$550.

The above document was sent to the State Congress by Dr. An tonio Gonçalves Ferreira, governor of the State, with a message of which we extracted the following paragraphs:

« It is thus that by the proposed reform presented, the State troops will be reduced to 1.303 privates and 36 officers, distributed, according to the table approved, by a regiment of infantry and a squadron of cavalry, the former with 1.244 men and the second with 59 privates under the general command of a colonel who will have full charge of the service. »

The city is crossed by the tracks of the « Companhia Ferro Carril Pernambucana, » which inaugurated its service on the 21st of September 1871 with the Magdalena line. Then they started the Afforgados one, on the 20th of November of the same year, Santo Amaro, on the 14th of January, 1872, Capunga, ending in Fernandes Vieira, in the beginning of the square in which they plan the construction of the Amorim park, on 21st of September, 1872. The tramways are large, in good conditions, comfortable, and the general service is good. In 1903 this company earried 7.000.000 passengers in the different lines, which run over a total of 25 kilometres.

Generally the tramway service is good though they adopt as yet animal traction. It is noticed by the visitors why such a beautiful and progressive city should not adopt electrical traction as nearly all the important cities of Brazil are doing.

As to railroads the State of Pernambuco has the following companies:

		Metres
Estrada de Ferro do Recife a S. Francisco		124.739
Estrada Sul de Pernambuco		195,908
Estrada de Ribeirão a Bonito		26
Estrada de Ferro de Cucañ		70
Estrada de Ferro Santos Dias		
Estrada de Ferro Central	,	178.900
Estrada de Ferro do Recife ao Limoeiro (main line).		82.976
Estrada de Ferro de Carpina a Nazareth (braneh)		15.069
Estrada de Ferro de Nazareth ao Pilar (branch)		84.240
		677.928

Besides these the State has other railways connecting the Capital with the suburbs:

« Estrada de Ferro Trilhos Urbanos do Recife a Dois » with a branch going to Varzea, the trains of which start from Republica square. The line until Apipucos was inaugurated on the 5th of January 1866. The branch that follows to Varzea separates itself from the main line at the Entroneamento, crosses Capunga, goes over the Lassarre bridge and thence through the new road near a place named Zumby, following up to Caxangá.

From the entroneamento starts a new branch following by the Arrayal, which connects again to the main line in Monteiro. This railway belongs to an English Company: the Brazilian Street Railway; its track is 1^m20 wide and has 26 kilometres extension.

The «Trilhos Urbanos do Recife a Olinda e Beberibe» Company has its main station at Rua Visconde do Rio Branco (Aurora) at the South of Pedro II bridge. It is 12 kilometres long, its track is

1^m32 wide and belongs to a Brazilian company. The main station at Rua Aurora was open to the public in 1873.

For transportation and sea communications, Recife supports a coastwise navigation company (besides other enterprizes that call there, belonging to other States). It is the «Companhia Pernambucana de Navegação a Vapor» founded in 1853 which has eight steamers for that service with 6.967 tons for eargo and accommodations for 1.100 first and second class passengers.

* *

SUNDRY NOTES ABOUT THE CITY. — There are in Recife the following banks with the following capital:

 Banco de Pernambuco
 ...
 8.000:000\$000

 Banco Popular
 ...
 1.500:000\$000

 Banco Emissor
 ...
 20.000.000\$000

 Banco Credito Real
 ...
 1.000:000\$000

The following banks have branch houses:

The London and Brazilian Bank Ltd.
The London and River Plate Bank Ltd.

There is also an agency of the Banco de Republica do Brazil, of Rio de Janeiro, and a new bank under the name of Banco do Recife with a capital of 2.000:000\$000 has just been founded.

The eity is illuminated by hydro-earbonic gas of which there is an excellent factory and gasometre in S. José ward. It receives its water supply through pipes and has a complete system of sewerage. It has 345 streets, 29 squares, 215 lanes and 67 alleys.

In January of 1902 the city of Recife and suburbs had 20.147 buildings, being 19.895 inhabited, 169 under construction, and 83 in ruins.

Of these buildings 1.092 didn't pay any taxation for the good reason of having legal exemption from it.

The municipal revenue collected in 1902, amounted to 1.198:518\$985, which after adding the balance left from the previous year went up to 1.204.349\$336.

The population of the city has increased thus:

1810. . 25.000 inhabitants.

1842. . 72.600 m

1872. . 97,500 »

1890. . 129.074 inhabitants including Olinda and the other suburbs.

Other Cities of Pernambuco. — Besides Recife, one of the South American jewels, the Pernambuco State has within its limits some very pretty cities, active nucleus of civilisation and progress, which the net of railways is little by little uniting, so that they become homogeneous, let us put it that way, in the formation of that block of national soul and conscience, which is so rarefied and so unconscious once the sea-shore line is left to penetrate in the vast world of the west — the interior.

Here are the names of those cities, which are spread here and there, some connected by the railway, others that will be so in some future date:

Bezerros at the right of the Ipojuca river, at the North, near Serra Negra; Bom Jardim, in a beautiful position at the right of the Traeunhãem river, near the State of Parahyba do Norte; Brejo da Madre de Deus, situated in a valley and just from this very circumstance its name originates. The valley is formed by the Prata and Estrago hills. This eity formerly was nothing but a large farm belonging to the convent de S. Philippe Nery in Recife, Cabo is another city at the right of Pirapama, crossed by the E. de F. do Recife a S. Francisco railway; Caruam is in slightly inclined but healthy and dry ground, bathed by the Ipojuca river, and placed at its left. That river is quite strong in winter; Escada, also at the left of the Ipojuca river, high ground, many inhabitants, well mounted sugar factories and a railway station of the E. de F. do Reeife ao S. Francisco company, bathed by the Salgado and Goytá rivers which run near by; Garanhuns, in the centre of a hill top near the source of the Mundahu river; Gloria de Goytá near the eity of Páo d'Alho bathed by a little river of the same name, with sugar factories; Goyanna between the rivers Traeunhaem and Capiberibe-mirim. 24 kilometres from the coast with sugar-cane, coffee and tobacco agriculture; Gravatá at the right of the Ipojuea river; Itambé at the extreme end of the State in front of the Pedras de Fogo village, well populated, with a magnificent climate and fertile ground; Jaboatão, at 18 kilometres west of the Capital, with a good elimate, bathed by the river of the same name, connected with Recife by the E. de F. de Caruaru; Limoeiro, at the left of Capiberibe river, it is a beautiful plain; Nazareth, with 4.000 inhabitants at the right of the Tracunhãem river, in high ground, rocky and uneven connected with Recife by the E. de F. do Recife ao Limoeiro by the branch of its name; Olinda, only 6 kilometres away from Reeife, built on a hill bathed in the South by the Beberibe river, in the North by the Doce

river, in the East by the ocean. (It was formerly the capital of Pernambuco, then one of the most opulent and rich cities of Brazil) On the 23rd of November, 1831 the Dutch set fire to it. Among its buildings worth while noting is: the Church (Sé); the Seminary, an old college that belonged formerly to the Jesuits, the S. Francisco and São Bento convents well preserved; the Carmo convent in ruins, the Nuns Home; the terminal station of the E. de F. de Olinda, a large building where in olden times were sheltered the soldiers. It was the artillery barracks and to-day was reconstructed by the railway company. The City Hall building; the market; the S. Pedro Martyr. the S. Pedro Novo, the Amparo, the S. João, the Misericordia, the Milagres and other churches. Olinda's water supply is furnished by the Santa Thereza Company, the water coming through pipes from the Beberibe river. In the Varadouro there is a pretty bridge. Palmares, at the left of the Una river, in the E. de F. do Recife ao S. Francisco; Pesqueira, at the bottom, of the west side of Araruba hill where the Panema or Ipanema river begins; Rio Formoso, at the right of the river of the same name, near the sea coast, with 8.000 inhabitants became celebrated in the days of struggle with the Dutch; Taquarctinga, elevated to the rank of a city in 1887; Timbanba, but at a short distance from Pernambuco boundary line, separating it from Parahyba; Triumpho in the Baixa Verde mountain, cultivating largely coffee; Victoria, crossed by Natuba, a little river, situated at the left of the Tapocará river, in the E. de F. do Recife a Caruaru, it was formerly the Santo Antão village. Barreiros, crossed by the Una and Cariman rivers, near the State of Alagoas; Serinhãem, built on a hill at the right of the river of the same name; Bonito, at the left of the Madre de Deus river; Agna Preta, at the left of Una river; Petrolina, on the banks of the S. Francisco river, and in front of Joazeiro, in Bahia; Salgueiro and Bom Conselho, at the bottom of Taboleiro hill, at the right of the Lava-pés little river, which divides it into two districts, connected by two wooden bridges: Gamelleira, bathed by the Serinhaem river.

We persist in our opinion that this part of Brazilian fatherland will play a most important role in the progress and civilisation of the country. When we visited it, though we heard repeated complaints against the dull business, against such or such stability of local progress, we were convinced that we can trust decidedly and confidentially in the future of Pernambuco, without incurring in the error of being optimist. Its principal cultivation, the sugar-cane, is not threatening it, as the impatient ones cry. Pernambuco has a

sure market in the 16 or 18 million consumers right in the country. It suffices to close Brazilian markets to the alcohol, brandy and sugar imported from foreign countries, to amplify by industrial applications the use of the alcohol and the crisis of the State agriculture will be fought. To be sure that all must be preceded by the radical remodellation of the cultivation and manufacturing processes. Those 1.600 sugar plantations where sugar is manufactured by the old processes of large copper pans, have to be transformed into modern factories, or disappear from the regions where these new processes begin to be adopted.

The agricultural evolution will have to accompany inevitably the general evolution.

But what assures firmly the future of Pernambuco is its magnificent maritime situation between the two worlds, lucky position, nothing lacking to it, not even the proximity of good anchorage to help the access to the Recife one.

In fact, among other bays which make the coast navigation so easy, we will cite the port of Tamandaré, 120 kilometres south of the Capital, which is reputed one of the best, if not the best of the whole State. It is formed by a large bay in the coast, between the bars of the Una and Formoso rivers, closed in the front by the reef. It has an easy entrance, a good anchorage with deep waters and sheltered from storms.

The Federal Government installed there a quarantine station, modern style, of which the building nicely painted and clean we had to observe, even if against our wishes. The steamer in which we travelled going to Rio, called at Recife at a time when they reported the existence of the plague there. The steamer was sent to Tamandaré for disinfections and other annoyances, with which they perform all over the world the comedy of the official prophylatic theories. We gained by the visit. We got acquainted with one of the most beautiful anchorage places of Brazil.

THE STATES OF ALAGOAS AND SERGIPE

From Bahia to Maceió there are only 240 miles, and besides the traveller will have always in sight the low lands of the sea-coast. graceful in its curves, a little sandy, here and there, but fertile in the largest part of its extension, and always dressed by the woods

in which predominates the crown of the palm-trees, cocoa-nut trees in ondulating cultivations that have miles and miles of extension.

The first time we reached the port of Maceió, was on a June morning fresh and sweet, the diaphanous atmosphere left before our eyes the vision of an infinite field. At the left of those which from the



Maceió. - The light-house

sea look to the city, are awfully long plantations of eocoa-nut trees. The same moving bottom, is like a frame to the white buildings affording a joyful and pleasant panorama.

The buildings are spread penetrating the green block and seem to be advancing in two distinct columns, one low down lining the shore, the other going up the hill, a picturesque and reddish hill, not very high and which serves as basis for the light-house. Several church-towers appear above the thick body of the buildings looking for a superior atmosphere, spotting the serenity of the sky transparent blue. Towards the North and North-east picturesque houses and hamlets of humble people are lining the roads always green with the cocoa-nut trees till about a league's distance.

When the steamer anchors, an enormous quantity of boats gather around it, the boatmen shouting to offer transportation making a tremendous noise. In ten minutes everything is done and we are walking over the wooden bridges to enter the city. The landing place is a sea-shore called Jaraguá, filled with small houses without any importance and large commercial houses, storage rooms, docks and warehouses and navigation companies agencies. A tramway takes the visitor to the centre of the city, passing by the Universal hotel, a small hotel at the left, and a large building, painted in rose color, at the right, a little above, this is the building where the State Government was for a long time. After this we see commercial streets, squares, all filled of passing crowds of workmen, who constitute the main local activity.

One of the peculiarities of Maeeió is its light-house, erected in the centre of the buildings. All the other light-houses are surrounded by waves, this one is surrounded by houses.

* * *

The city has some 37.000 inhabitants, four newspapers, several clubs, associations, etc. There are also factories, banks and electrical illumination.

The general appearance of Maceió is pleasant. Elisée Reclus found it so, and said: « it is a most graceful city. » In fact there is nothing more picturesque than its agglomeration of white honses, framed inside the greenish cocoa nut trees and resting by the bright green looking-glass of its bay when the south winds don't revolt this one into brave waves. The city has progressed considerably in the last ten years.

They inaugurated the electrical illumination and erected fine buildings, both public and private. We will cite the Government's palace, inaugurated in 1903, a large building of solid construction, two pavillions of Italian style.

The Casa de Detenção, (house of detention or jail) is another large and good public building of Maceió. It has a large central body with three floors and two side galleries with lots of square windows.

The railway station always full of life and in a central locality is also interesting.

The church, a large building with two towers at the sides, of sober style, faces a public square with palm trees and other kinds with a modest religious monument creeted in the centre.



Maceió. — The Cathedral

The Treasury is one of the prettiest buildings in Maceió. It is quite large, with three floors, based on a parallelogram, kept very clean and surrounded by a pretty iron railing.

The building of the «Associação dos Empregados do Commercio» is also a three floor honse, but it has not, however, the appearance of the other building, being only noted because of its size.

There are some pretty and live streets, as Rua do Commercio, Rua Direita (straight street), which is somewhat curved and even tortuous, Rua Augusta, Rua Marcehal Floriano, wide and straight, Rua Nova and others.

We didn't see any large square with garden as we see further at the North.

There was a large square, centrally located that could be transformed in a public garden, but was spoilt by erecting there a large building for a theatre, as they told us, and which can be seen yet there in the middle of the square unfinished and grim looking, waiting for some elever mayor who will level the ground anew, delivering that square to its natural function becoming a fresh breather in the middle of the city.

* *

RAILWAYS AND NAVIGATION. — There are two railway enterprizes in this State: A Estrada de Ferro Piranhas a Jatobá, with 116 kilometres both the terminal places being on the banks of the S. Francisco river.

This railway connects two stretches of navigable rivers which are disconnected by the celebrated Paulo Affonso falls.

The Estrada de Ferro Central de Alagoas, running from Maceió to União, with 88 kilometres and a branch to Viçosa city with 67 kilometres.

They are building a line from União to Paquevira uniting this road with the Estrada de Ferro Sul de Pernambuco.

There are also under study the following railways: Estrada de Ferro de Maceió á Leopoldina; Estrada de Ferro de Maceió a Paulo Affonso.

The financial movement of the branch only of the Central de Alagôas railway in the five years 1897 till 1901 was:

YEARS				REVENUE	EXPENSES	BALANCE
1897 .				190:699\$080	167:400\$412	25:289\$668
898 .				281:226\$760	218:603\$746	62:625\$014
899 .				210:740\$150	180:527\$988	60:412\$442
900.				281:421\$550	205:409\$155	73:7128247
901.				506:1278150	249:9608556	56:166\$814

The revenue of the whole road in 1903 was of about 900:000\$000 and the expense 720:000\$000.

Besides, the State is crossed by a lot of wagon roads and country roads, in its majority badly kept.

In those roads the transportation is made in wagons driven by oxen, and on horseback, just as generally happens in all the interior of Brazil.

As to the water communications the State is quite far from the progress it ought to have because of its geographical configuration and extensive fluvial and marine coasts. The coastwise navigation is supported mainly by the steamers of the Bahiana Company. Lloyd



Maceió: do Commercio street

Brazileiro and Pernambucana Company, besides several small boats going up the S. Francisco river till the city of Penedo.

On that river is a line of steamers running between Penedo eity and the village of Piranhas, and a section of the Companhia Pernambucana is under work.

On the Manguaba lake there is navigation between the Capital and the city of Pilar, the steamers running there belong to the « Companhia de Navegação das Lagôas » with main office at Maceió.

They are small paddle steamers, of 100 to 150 tons like those navigating between Iguape and the small fluvial cities of São Paulo.

The port of the Capital, is visited by large eargo-boats, both Brazilian and European. Seldom a week goes by without at least a couple of steamers ealling there.

* * *

Commerce and industries. — While as to its size this is one of the smallest, being, as it is, the 17th. On the list of the 20 States, Alagôas can speak with pride of its production and commercial activity.



Maceió. - Principal railway station

Its main industry is the sugar-cane cultivation and sugar manufacture. Once known the actual crises in which this product has hardly any value we can imagine that the State's Treasury is not becoming overrich with its main source of revenue, neither the commerce and industries of the country must feel very happy.

Yet, work goes on just the same, the factories whistles continue to be heard, the factory machinery makes the usual noise, and the industrious population keep on developing their activity.

There are in the State seven cotton mills all of them are moved by steam, three vegetable oil, eight cigar, several leather tanning, some paper, soap, cordials, vinegar, shoes, brick, rice, lime factories besides 838 sugar making establishments by old processes.

There are several modern sugar factories as that of Mr. Vandesmet, that of the Brothers Leão, in Utinga.

The State has 18 cities, 15 villages distributed among 33 municipalities. Of these cities we must mention Penedo which has a fluvial port, a most important one over the S. Francisco river of which it is the emporium. Unfortunately it ean't harbor but middle draught ships. The small boats of five States, Minas, Bahia, Pernambuco, Sergipe and Alagôas come there with their loads of cotton, sugar, leather, lumber, etc.

Further on we will give some notes about the different cities of Alagôas.

The production and commerce of those 18 cities and their respective municipalities have developed a good deal these last few years, in spite of the low prices of their main merchandise — the sugar — and the fact of its agriculture being led, by old processes, by routine.

Yet in the first six months of 1901, they exported 17.556.493 kilos of sugar 1.384.050 kilos of eotton. The total value of their commerce through the two ports of Maceió and Penedo was in nine months of that year:

Exports 8.529.858\$900 Imports 5.219.553\$530

After the Paraná and Amazonas States, Alagôas is the one of most recent organisation as to autonomic political personality, as the old *capitania* only was taken away from the Pernambueo province on the 16th of September 1817 and by the declaration of independence on the 7th of September 1822 it was also considered a province of the empire.

With the transition from the empire into the republic in Brazil, on the 15th of November 1899, the old province took the denomination of a State on the 11th of June 1891 once promulgated the State constitution and definitively constituted the autonomous State on the 1st of July 1892, during the administration of the Governor, Major Gabino Besouro.

The area of the State is estimated at 28.500 square kilometres, having the form of a rectangle, the principal side of which is in the mouth of the S. Francisco river.

On the Atlantic its sea-shore has an extension of 264 kilometres. By its area we see it is one of the smallest Brazilian States, yet is larger than many Eupopean independent countries. In consequence of its geographical position it has no very long interior territory,

and that way, even from the farthest away points of its boundary lines with Pernambueo State, we can go to a port on the S. Francisco river, or on the sea-coast with a run of 32 leagues or 192 kilometres, maximum.

The population of the State, according to the census taken on the 31st of December 1900, was 649.273, being 319.437 males and 333,000 females.

* *



Maceió. - The Martyrs Square

Other cities of Alagôas. — After Maceió, the most important city of the Alagôas State, is *Penedo*, built on the banks of the S. Francisco river. It is in a very favorable position for its development. It was elevated to the class of village on the 23rd of April 1636, with the denomination of S. Francisco and to the class of city by the provincial law, decree n° 3 on the 18th of April 1842. It comprises the districts of Penedo, Mucambo, and Salomé, parish of Nossa Senhora do Rosario do Penedo, created by provincial law, decree n° 7, on the 23rd April 1842. Its population is 18.421 inhabitants.

The Federal Government has there a Custom House. Its principal export product is sugar. It has three newspapers: A Fé Christã,

catholic weekly; O Sul de Alagôas, a commercial newspaper; and O Trabalho which is the paper with the largest circulation in the State, devoted to the interest of the agricultural classes as well as commercial and industrial ones.

The city of Penedo is illuminated with kerosene oil, but there is a project to substitute that system by electricity. It has 1.912 houses.

ALAGÔAS. — It is not of the cities of largest population. It has only 15.336 inhabitants as per the census taken in 1900, but it is ahead of the others by its wealth and production, consisting mainly of sugar, manufactured in 20 factories, grain plantations, and an extraordinary production of fruit. Its commerce is rather small and its industry of little account, excepting fishing which is largely carried on on the lake. Coffee is cultivated there in small scale.

Atalaia. — Is quite an old city created between 1762 and 1765. Formerly it had the denomination of Arraial dos Palmares.

It comprises the districts of Atalaia, Ingazeira, Sapueaia, and Fazenda da Poranga, parish of Nossa Senhora das Brotas da Atalaia. Population (of the municipium) 28.420 inhabitants, being 12.862 males and 14.169 females. Their elements to earn a living are varied and the city seems to have entered a new life, with the impulse it received after the building of the railway branch line connecting it with Viçosa.

Sugar and cotton are the main sources of wealth, not speaking of the enormous production of grain.

There are in the municipium 157 farms where they manufacture sugar. Many are partly in the municipium of Parahyba, lately created. There are also important sugar factories, one of them worth more than 1.000:000\$00 belonging to F. et G. Vandesmet. They also devote themselves to cattle raising.

CAMARAGIBE. — Or Passo de Camaragibe, was denominated village in June 1852 and city by provincial law nº. 842 on the 14 th of June 1880. It comprises the districts of Camaragibe, Matriz de Camaragibe and Soledade, parish of Nossa Senhora da Conceição do Passo de Camaragibe, created by a law, decree nº. 417, on the 9th of June 1864. Its population is 22.696 inhabitants.

It is an industrious population and the Passo de Camaragibe is quite an active place. There are 61 sugar manufacturing places, which shows that the sugar-cane agriculture is the largest resource of the locality. After it is the cotton, mandioea, beans, eorn, rice and cocoa-nuts, the latter forming beautiful forests on the sea-shore. The exports are vegetables, building lumber, maintaining in good footing its internal commerce.

Maragogy. — Formerly called Gamella, when it was part of the Porto Calvo municipium. It was ranked as a village by provincial law n°. 681 on the 24th of April 1875 with the name of Isabel. It was installed on the 2nd of December of the same year. Then was denominated Maragogy by provincial law n°. 733, on the 3rd of June 1887. It comprises the districts of Maragogy, Bara Grande, parish São Bento de Maragogy created by provincial law in April 1855. This city is the seat of an essential agricultural municipium, having 43 sugar factories. There are large fruit and vegetables plantations, and extensive plantations of cocoa-nut trees. It has a regular commerce, and its industry limits itself to fishing and manufacturing straw hats.

Palmeira, — Installed by law n°. 27 on the 12th of March 1838. Suppressed by law n°. 43 on the 4th of May 1846, and restaured by law n°. 209 on the 23rd of June 1853. It became a city by law n°. 1007 on the 20th of August 1889. It comprises the districts of Palmeira, Olhos d'Agua do Aceyoli, Santa Cruz, Cabeceiros and Caldeirões, parish Nossa Senhora do Amparo da Palmeiro dos Indios, created in 1798. Population 15.910 inhabitants. The resources of this city and its municipium consists in cattle raising, its commerce, which is somewhat developed and its agriculture, producing large quantities of cotton, as well as sugar manufactured in 10 farmhouses, corn, beans and other vegetables. Its industry has only a few factories to shell cotton, tan skins and prepare salt and lime.

S. Braz. — Village by provincial law n°. 1.056 on 28th of June 1889. Separated from the Porto Real do Collegio. It comprises the districts Braz and Lagoa Comprida, parish S. Braz, created by provincial law n°. 702 on the 19th May 1875. Population, 9.373 inhabitants. It has considerable cultivation of cotton with factories to shell it and pack it in bales. It has also rice, mamona and complantations.

This city raises and exports cattle, has factories to tan skins as well as soap factories.

Santa Luzia. — A pretty small city, an industrial one, with 15.000 inhabitants. Its municipium comprises 57 sugar factories, and that is its largest revenue. It has two cotton mills well mounted in Fernão-Velho and Cachoeira, and one brick and tiles factory in Satuba.

There are two other cotton mills under construction, one annexed to the Cachocira one, and the other in Rio Largo, between that place and the branch line of the city of Viçosa.

The Cachoeira cotton mill, says a newspaper, distributed in 1893

over 40 % dividend to its stock-holders. Business in this district is becoming prosperous, with the impulse received by the railway « $Uni\tilde{a}o$ » and that branch that crosses the same municipium.

UNIÃO. — Was formerly called Santa Maria. It is the head of a fertile municipium, the principal wealth of which lies in the large cotton plantations as well as those of mandioca, corn, beans and other vegetables all of which give life to its commerce already improved by the impulse it received with the Alagôas Railway, which connects it with the Capital and soon will be the terminus of the Sul de Pernambueo railway branch, starting from Paquevira. It



Pilar. - View of one of the principal streets

exports besides the above mentioned articles, the sugar manufactured in seven factories, the tobacco in strings, leather, skins, brandy, eattle, pigs, etc.

This city has a factory for the extraction of the mamona oil, cotton shelling, sawing lumber, preparation of mandioca flour and other works.

Traipu. — It is a pretty city with from 19.000 to 20.000 inhabitants. It is the seat of an important municipium of which the principal source of wealth is the cattle raising. It cultivates cotton and grain and has several factories to shell cotton.

Its commerce is somewhat active and the dried salted beef prepared there is exported in quite large quantities. Traipù while village was called Porto da Folha, by a provincial law of April 1835, installed on the 2nd of August 1838. It became Traipù by provincial law n°. 516 on the 30th of April 1870.

PILAR. — With this name was installed in March 1872 the city, seat of a most industrial municipium, the elements of wealth of which, are varied and abundant. The principal one is the sugar manufactured in 27 factories. Cattle raising, however is quite limited. Its commerce is prosperous and the manufacturing industry has



Pilar. - Commercio Street

grown considerably. It has four brandy distilling factories, one working by steam and in a large seale, two eigar factories, one cotton mill, two shoe factories, and many others.

Population, 15.313 inhabitants. In Pilar they publish an instructive news magazine, the organ of the «Sociedade Fraternal dos Caixeiros do Pilar», under the title of *Vinte de Julho*.

Porto Calvo. — This city has a relatively large population, having 30,000 inhabitants. Its largest resource is sugar manufactured in 64 factories. Cattle raising is not done in a large scale. Its commerce also could very well have a good deal more life, if the natural resources this part of the State disposes of were better taken care of. Its industry also is not much developed.

S. Luiz do Quitunde. — A pretty city with 18,266 inhabitants. The municipium has 78 sugar factories. They also export lumber, cotton and other products, among which are cocoa-nuts, in large quantities. It has several alcohol and brandy distilling places, and for a larger development in this line, a factory is going to be established with a capital of 400 contos. They manufacture also bricks, tiles, etc.

S. MIGUEL DE CAMPOS. — This city with its municipium has 20.326 inhabitants, 17 sugar mills, and produces in a large scale cotton and many kinds of vegetables, which it exports as well as it does



Paulo-Affonso falls, view of the principal water-jump

leather, skins and salt. There is hardly any industry, very little cattle raised. It is, however, about to inaugurate a large sugar factory moved by steam.

There are still other villages worthy of mention, as Campos, S. Luiz de Quitunde, Limoeiro, Triumpho, Santa Luzia do Norte, Parahyba, S. José de Lage, Anadia, Cururipe, Belmonte, etc.

* *

We will not close this chapter without speaking of Paulo Affonso, the celebrated falls. Two collossal water falls, shake the eternal silence of the woods, one at the North, the other at the South. The

latter is the Salto das Sete Quedas (Jump of the Seven Falls), about which we will speak later on when we shall write about the Paraná State, the former, is the Paulo Affonso fall in the S. Francisco river, and just in the boundary line of the Alagôas State.

The S. Francisco river, running with a speed of about a foot and a half a second, coming suddenly across a mountain of basalts, in its violent stream, throws itself up, and precipitates itself down the rocks into the waters 150 feet below. « The principal water jump, » says a Brazilian writer, « falls down forming a curve, at half way from the stone canal through which the waters run, impels the current north-ward against the waters on the other side of the stream, mixing, or as we might say, crushing themselves. When they meet each other we do not see the volume of the water in mass, we see but foam, steam, a fog, and in a dreadful jump, those revolting waters, all crushed into a fine spray fall into the abyss.

This fall is 15 to 18 metres wide and passing through such a narrow channel becomes noted because of the impetuous violence of its current.

THE STATE OF SERGIPE

Sergipe is the smallest of Brazilian States, its area being only 39.090 square kilometres. Yet, what it has less in territory, compared with the other 19 States of the Brazilian union it has more in density of population. Even the total figures of population — 356.264 inhabitants — is superior to those of Espirito Santo, 209.783; Santa Catharina, 283.769; Pianhy, 334.328; Goyaz, 255.395; Amazon, 249.756; and Matto Grosso, 118.025.

How many powerful people would dare to engage themselves in conquest war, to round the figures of its territory to those 39.090 kilometres of the State of Sergipe!

Be as it may, the old province has to-day just as its sister States, perfect autonomy a political organisation identical to those of the most advanced and powerful States of the Republic.

Sergipe has progressed industriously and usefully, sufficing to say — and for that there is nothing like figures — that, only in 1903, the production exported to the other Brazilian ports and Europe went up to 70.000:000\$000.

We also verified that Sergipe excelled many of the other States with its commerce.

Its capital, Aracajú, is a city with 20.000 inhabitants, but it is not very accessible because of the Cotinguiba bar. Were it favorably situated, by some large and deep river, as Rio de Janeiro, Bahia, Reeife, Belem, or even Maceió, we can well imagine what proportions of growth it would take among the other Brazilian capitals.

Even the way it is, almost hidden, without a frequent and rapid navigation service, Aracaju is growing. Twelve years ago it had a dreadful aspect, to-day it is a pleasure to pay it a visit: the number



Aracaju. - A part of the landing-place

of buildings increases, new and pretty ones are going up every day, and the area of the city keeps on extending itself dominating the small farms and uncultivated fields of the suburbs. It was only in 1901 that the street paving work began, thanks to the energy of the patriotic Governor, Olympio de Campos.

When the visitor enters Araeajū thinking he is going to see a eity in a state of decadence, he finds himself agreeably surprized with the general aspect of that Capital, its commerce, that life peculiar to a place growing up and destined to become great in the future.

Among other streets, all of which run straight, broad and parrallel, the following cause a splendid impression: Laranjeiras,

Aurora, S. Christovão, Japaratuba and Itaporanga, quite long ones offering a pretty perspective.

Among the pubic squares are noted by its size, the one where the Matriz church is and the Palacio square, which has not as yet any garden, but embellished with imperial palm trees nicely planted in rows.

Among the noted buildings we will cite: the Matriz church, which has some originality in its front with two side towers, sup-



Aracajū. — Aurora street

ported on square base. These towers have three floors facing the front.

This church has the form of a parallelogram, and all its exterior obeys to an hybridism of the German ogive style with its heavy lines of colonial construction.

At the front there are a few steps and a modest railing which give the three doors that give entrance to the church.

The Government Palace is another fine two floor building, surrounded by large windows, and having in its front the Republic coat-of-arms. As to its architecture it is not worth much, but in its interior is decorated with decency and good taste.

In front of this monument is a large, light building, facing the square with columns of classic order in front serving as basis to a triangular top. This is the Palaee of the Legislative Assembly.

The charity hospital, a large building, all white, composed of two lateral structures, connected one to the other by a centre one serving of vestibule and entrance to the hospital.

The Normal College, a modern building, of only one floor, square but elegant, a double stairway giving access exteriorly to the main entrance, which is lined by railing.



Aracajú. - Matriz church

The Jail is a solid building with small windows which give to its exterior a characteristic aspect of the object for which it was built.

The cotton mill, the police barracks, the branch office of the Federal Treasury are, all of them, buildings that contribute to the embellishment of Aracajú in conjunction with the large number of mansious, residences and business establishments.

* * *

Public Instruction, Police and Finances. — There being in Bahia, quite near this State, a number of institutions devoted to superior grades of Public Instruction, which are quite accessible to the

people of Sergipe, it is evident that there is no necessity for the State Government to make sacrifices by mere luxury keeping academics and universities in Aracaju. In this Capital, however, there are schools to prepare the students for college. There is the Athenen Sergipense, which had in 1900, 75 students; in 1901, 98; and in 1902, 83, all of them preparing themselves for examination which will admit them to the different colleges in the different States of the Republic. The Normal College had in 1902 one hundred and four pupils. In Maroim, the Instituto Cruz prepares boys for commercial pursuits. The latter establishment was



Aracaju. - Prison Place and Buildings

founded by a philantropist Mr. João R. da Cruz, an industrial man who bequested an annual income for its support.

The Government also gives a subsidy to this establishment, and has in Estancia, Laranjeiras, Maroim and Propriá High Schools teaching: national grammar, French, Arithmetic and book-keeping.

As to Grammar schools, there are in the State, besides the Salesian and other private schools, 209 classes. Of these 43 are for males, 56 for females and 110 for both sexes, being 22 in the Capital, 55 in the cities, 44 in villages and 85 in smaller places.

The frequentation in 1900 was 4.110 students and the number of matriculations was 6.167. In 1901, the frequentation was 4.554, the

matriculation, 6.831. In 1903 the matriculation went up to 7.693 and the frequentation was 6.130.

The police force is constituted by an infantry battalion, divided into three companies, with 400 men commanded by a major.

The financial conditions of Sergipe are good. In 1904, Governor Olympio de Campos who has been a most clever and discreet political chief said in his message to the local legislators:

« It pleases me to declare to you that Sergipe is one of the States of the Union which is settled up to date regarding every one of its responsibilities, paying all its expenses with the ordinary revenue of its public administration services ».

In 1903, Sergipe had unforeseen expenses, founding new schools, building bridges, improving roads in the interior of the State and in spite of that, discharged all its obligations, including the two last installments of the amortization of a loan it had raised in the « Banco da Republica of Rio de Janeiro ».

As to its municipal administration we may well praise the spirit of order presiding to the finances in that part of the country, and there is no municipality in the State that doesn't present a surplus at the close of its fiscal year, modest as it may be in some eases.

The budget of this State is of about 1.800:000\$000, revenue and expenses being about even. The following table is very interesting showing the constant growth of the revenue of the State in ten years, 1890-1901:

YEARS					YEARS REVENUE			
1890 .					541:891\$482	751:551\$686		
1891.					595:564\$996	605:548\$218		
1892.					668:469\$715	, 564:865\$255		
1895.					1.090:002\$850	732:571\$815		
1894.					1.326:892\$613	1.099:532\$090		
1895.					1.107:802\$264	1.550:562\$184		
1896.					1.415:002\$537	1.674:245\$517		
1897.					1.316:551\$169	1.704:155\$129		
1898.					2.115:879\$555	2.424:694\$985		
1899.					1.775:174\$193	2.205;756\$540		
1900 .					1.856:959\$508	1.765:569\$056		
1901.					1.664:085\$905	1.682:159\$186		

* *

PRODUCTION, INDUSTRY AND COMMERCE. — Sergipe belongs to the group of those Brazilian States which devote themselves to a mono-

culture, and when it so happens, if the product of that monoculture obtains high prices, all is well, everything is easy, but if that production is depreciated in its value, as it has happened with sugar and coffee, then the situation is a dreadful one.

Sergipe cultivates sugar-cane in a proportion that almost means exclusivism. The computation of the sugar-cane products and their official value in the ten years, 1890-1901, was: sugar 262.617 tons, representing the value of 53.796:483\$995; brandy 10.057.859 litres, representing the value of 2.424:713\$307; alcohol 191.648, litres, representing the value of 74:564\$088; and melasses 225.178 litres, representing the value of 11:531\$000; this shows a total of official value of 56.306:892\$390, and the average sugar price was 204 reis per kilo. The weight of the sugar-cane corresponding to the 262.617 tons of sugar exported, taking as a basis 6 % of sugar, is equivalent to 4.376.948 tons of cane.

Sergipe has in several cities improved factories for the sugar manufacture. We will mention among them the Riachuelo one which belongs to the Assucareira Company of Rio de Janeiro, which has another factory in Botafogo, in the Federal Capital, moved by electricity, having cost 5.000.000 francs and producing 18.000.000 kilos refined sugar yearly.

The «Usina Central do Riachuelo» is one of the best in Brazil, has a branch railway to connect it with the main line, has improved machinery moved by steam and electricity, distilling apparatus, vaste sugar-cane plantations, and grinds annually 20.000.000 tons of sugar-cane, producing 3.360.000 kilos of sugar and 1.200 casks of sugar-cane brandy.

The surplus of the local consumption is exported, not without difficulty, because, as we said above, very few steamers call at Aracajú. They manage, however, to export all its surplus by the three small ports of the State: Cotinguiba (Aracajú city) Rio Real (Estancia city) and Vasa Barris (S. Christovão city).

By the following map we will show the export figures during ten years, 1892-1901:

Map of the sugar exported from 1892 to 1901

Years				Kilogr.	Yeara.			Kilogr.
1892.	٠			16.475.420	1897			20.050.479
1893.	٠		٠	16.859.381	1898			59.432.800
1894.	٠			50.694.962	1899			19.558.785
1895 .				57.652.219	1900		٠	25.710.260
1896.				29.115.857	1901			29.515.714

Once we have written about the State exports, we must offer

data about the imports. Unfortunately we have no dota more recent than 1899. We will give then the tables of the three years 1897-1899:

SERGIPE EXPORTS FROM 1897 TO 1899

In	1897:		
	Direct importation		1.297:094\$653
	Coastwise importation		2.219:072\$040
	Through Estancia Custom House		1.007:012\$849
	Total.		4.525:179\$542
In	1898:		
	Direct importation		1.136:512\$664
	Coastwise importation		2.989:461\$440
	Through Estancia Custom House .		1.859:887\$972
	Total.		5.965:662\$076
In	1899:		
	Direct importation		671:309\$168
	Coastwise importation		5.555:278\$465
	Through Estancia Custom House.		
	Total.		6.085:715\$286

These figures show how quickly the State is growing, as its imports show, to a certain extent, its consumption, and consequently, its growth. It would be interesting to compare previous figures.

We will take, for instance, the figures of the budgets of the State, during five years of a remote time and five years of a more recent period, and the striking difference will show us the progress attained:

YEA	RS		REVENUE	EXPENSES
1855-1856			 145:659\$218	145:669\$218
1856-1857			75:650\$180	74:951\$640
1857-1858			144:676\$515	145:249\$701
1858-1859		٠,	129:545\$015	128:846\$760
1859-1840			122:641\$937	125:308\$455
	٠			
1895			1.090:002\$850	722:571\$815
1894			1.526: 92\$613	1.099:552\$090
1895			1.107:802\$274	1.550:562\$184
1896			1.415:002\$537	1.674:245\$517
1897			1.516:551\$169	1.704:155\$429
1898			2.115:879\$555	2.424:694\$985
1899			1.775:1748195	2.205;7568510

The above figures are quite significant.

But let us go back to the sugar production, which we were dealing with before this retrospective digression, as Sergipe owes to it the growth of its public wealth.

We wrote-about the sugar-cane factories, some by old processes, some with improved machinery, some in the sugar-cane plantations farm-houses, some in the cities. We spoke of some with improved machinery which were being installed in order to increase the manufactured quantities of sugar and cheapen the price of its production.

We will now present a list of these farm-houses sugar factories, of all the diverse types, which are now in operation in the different cities and municipiums of the State:

SUGAR-CANE FACTORIES NOW IN OPERATION
IN THE STATE OF SERGIPE

		Motors				
MUNICIPIUMS	BY STEAM	BY WATER	BY ANIMAL TRACTION	TOTAL		
S. Christovão Itaporanga Laranjeiras Riachuelo Maroim Rosario N.ª S.ª das Dores Capella Pacatuba Villa Nova Riachão Espirito Santo Divina Pastora Itabaianinha Siriry Estancia Arauá Itabaiana Villa Christina Lagarto Santo Amaro Simão Dias Soccorro Santa Luzia S. Paulo Japaratuba Propriá Boquin Aquidaban	6 9 355 255 16 32 	2 	3 8 4 6 1 7 6 29 10 14 17 17 7 53 19 17 47 6 24 7 1 5 10 20 7 1 14 24 8	11 17 39 31 17 39 6 6 66 16 14 19 21 38 34 32 49 50 7 27 8 19 51 11 28 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46		
Total	276	15	582	671		

The industry of the State of Sergipe, besides the 671 sugar factories has: 2 cotton mills, one in Araeajū employing 500 workmen, the other one in Estancia, with 360 workmen; 1 oil factory; 1 rice and 2 soap factories in the Capital; 2 oil and soap factories in Estancia, and there are a number of others of which we cannot give an accurate account for lack of data. In the municipiums of Itabaiana and Nossa Senhora das Dores there are some cotton shelling ones; in the Capital there is a foundry and iron works of fair size; 1 mamona oil factory, 1 saw mill, 2 shoe and several eigar factories, 2 sugar refineries. In Estancia, there is a shoe factory, and iron works. In Laranjeiras and Maroim there is an iron foundry and a eigar factory.

* *

OTHER CITIES. — Besides Aracaju, there are other cities in the State of Sergipe that are prospering: Maroim, Estancia, Laranjeiras and Riachuelo are the principal ones.

Estancia. — Is one of the best cities of Sergipe, divided into four districts: Estancia, Banco Além da Ponte, Rio Branco and Rio Real, with 14.555 inhabitants according to the eensus of 1892. It has about 2.000 houses and a church — Nossa Senhora de Guadelupe, — which is one of the nicest churches in the interior of the State. There is also the Commercial Club, the União Caixciral club, both with fine buildings in the Vinte e Quatro de Outubro square, the Charity Hospital, in the Hospital Street, 2 threading mills; 1 eigar factory; 2 shoe factories; 2 oil and soap ones; 2 alcoholic drinks distilling works; 3 hotels and a number of business houses.

In Estancia they publish A $Razar{a}o$ a newspaper of large circulation in all the State,

LARANJEIRAS. — Is a city of 11 to 12.000 inhabitants, and is the seat of the municipium with Itaporanga and Riachuelo. The latter and Laranjeiras are constantly disputing the seat of the municipium and have both alternatively had that honor,

Its commerce is all made with Araeaju, Estancia and Maroim, by boats and cauoes, and a monthly trip of fluvial steamers which take the passengers from the port of Sapé, and thence they go to Aracaju. It was village since March 1873 and city by decree of 25th of December 1870.

To-day Laranjeiras is the seat of the municipium, and thus has the honor of having as its guests the judges, court clerks, district attorneys and other officials. We believe, however, that its largest advantages will come to it by the large sugar factory that some industrial men have built there, where from a short branch railway (the only one there) starts to connect it to the port of Sapé. A monthly fluvial steamer comes to this port of Sapé from Aracaju.

ITABAIANINHA. — A small city with 9.000 inhabitants, or 16.000 if we include the neighboring districts Geru and Umbauba.

It has a little commerce, many cattle ranches, sugar factories, which is the principal branch of agricultural industry in this territory. It exports sugar to Estancia and Timbó and furnishes the interior of Bahia with flour and sugar. They are now building there a telegraph line, and it is expected that the prolongation of the Timbó railway shall go through that municipium. The water reservoir built lately by the Government is one of the best public works of this State and protects it from any famine.

The other cities, Maroim, Propriá, Divina Pastora and a few more are yet beginning to develop and present nothing worthy of note as yet.

THE STATE OF BAHIA

Some 720 miles North of Rio de Janeiro is an immense gulf, deep and sheltered, at the eastern bank of which lies the city of Bahia, Capital of the State of the same name. It is the third city in all Brazil and one of the largest on the whole continent. The optical illusion of the sight around the bay is complete. Nothing disturbs it. The observer embraces it all in a glance.

It is not so pretty, neither is it so vast, (judging by what we see), as that of Rio de Janeiro. It doesn't present either those natural aspects in conflagration, those stupendons basalts, those curves and accidences; of a large ridge of mountains, like pieces of scenery, lining the entrance and the end of the other bay.

The panorama is quite different: it is not astounding, it is seducing, it doesn't dazzle our eyes, it invites us to contemplate it, it is not the scenery of a battle, it is a painting of a charming landscape.

Every visitor has that pleasing sensation, looking at the whole sight of the city, with its port, and expresses it by exclamations that show his admiration. In fact, appreciating this sight, it is far more the picturesque of it than its greatness that produces fascination in that perspective of the Bahia bay. And the city, spread out in an amphitheatre, opening itself in a half circle to the observer, between the two blue lines of the waters and the sky, originates that im-

pression of a transparent, filigree like Sevres miniature, a patient composition of endless little details engraved in the green inclinations of the mountain sides, a dreadful work of natural decoration, like so much lace embellishing the hills, under a large and sweet light that drops from above.

The first foundation in this capital was placed in 1549 by Thome de Souza. It can boast of being the oldest of all the Brazilian cities. It is most probable that its sister capitals will not envy that primacy.

For the visitor, when he has left at his right the Santo Antonio fortress, and on his way to the anchorage place, he reviews that multifarious spot of the city, spread from above upon the unmovable gulf, as an absurd cascade of houses, towers, colors and confused shapes, the sensation that his retina — that bearer of poetry — transmits to his soul, is one of those to last impressed on man's mind for a couple of generations.

The two rows of buildings, embracing the mountain at the same time, at its basis and its vertex, advance in disorder to meet each other,—at least is that what we see from afar,—in the green declivity of the hillside, and pushing this way, pushing that way they engage themselves in the busy task of conquering it.

Here, they get near each other, there, they separate again. It seems as if iron rails were tearing furrows in the mountain exposing its reddish flesh and its hard stony skeleton, with viaduets here and there and roads that look like stony belts.

All this spectacle, which, after all, is nothing else but the history of the city growth, is displayed there, detail by detail, in a long panorama, that even in the configuration of the ground springs a new optical element to wrap the whole soul of those who contemplate it.

* *

Let us land. Now we can distinctly see, divided in two, that mass of buildings, one forming the « down town », the other forming the « up-town ». We must confess that as we enter the city a large part of the impression received vanishes. We jump on a small dock of the Navy Arsenal, wherefrom, through an old, unstylish gate, we are led into one of the oldest streets of the city. It is Ribeira street, which preserves its name from colonial times and its buildings of real Portuguese style of construction. It is not a very fine vestibule for such a noble Capital. The street is somewhat straight, but very narrow, quite shaded because of the tall buildings. It looks like a street in Oporto or in Toledo. A little further ahead, at the right is



BAHIA. — QUAYS AND LANDING-PLACE

the entrance to a small tunnel with a strong smell of engine oil and steam. This tunnel leads to a mechanical elevator, one of the conveyances for the population to be transported between the two cities.

Passing that, the visitor finds himself in a better place, Alfandega street and after that, Princezas Imperiaes street, a large and pretty artery of the commercial part of the city with big buildings with four and five floors. That row of houses face also the front of the quay and they are noted by their symetry and proportions which dissimulate their modesty and architectural design.



Bahia, - The Governor's Palace

They are large buildings occupied by agencies, banks and offices af all kinds. There and in the neighboring streets lies the nervous system of the commerce of Bahia. From them start many side streets and lanes, narrow streets crossing in all directions, having other narrow and tortuous streets as the others but in a longitudinal direction from the basis of the hill, crossing in their course some small squares as the one of the Tamarindeiros, filled with trees and the Ouro Square, not altogether paved. It is a perfect maze for the newly arrived.

They do nothing but business, only business. So much so, that in the afternoon, — as there is not in this district any of those

luxurious stores with show windows as there are in Rio de Janeiro and São Paulo, brightly illuminated in the evening, — as soon as it becomes dark, every store is closed, the streets become almost desert and in place of the noise of the day time movement, there comes a silence enveloping those tall buildings and desert streets.

All that immense multitude of people working hard from sun to sun, immigrates at the sunset to the *up town* districts, or to the seashores as Rio Vermelho, Barra, Itapagipe, and the commercial district sinks into that silent sadness of a convent, were it not for the electric railway that from time to time brings back to this district a little of its conscience, illuminating speedly on its way.

By this low plane and always surrounding the mountain, there goes a road sowing the way with new buildings, new roads, ruins, and of docks buildings filled with merchandise, coal depots, all this intermingled with residence buildings, high buildings, old and new churches, till the free, airy part of the city, where wider streets appear like those of Mangueira, Jequitaya, Calçada and Dendezeiros, and afterwards new squares, new streets and new districts as those of Rome, Boa Viagem, Itapagipe and others, a sketch of an augmented Babel.

Let us leave this district of which we will speak later on as the transportation means are easy and quick, everything served by electrical transportation. We will go back to our starting point, and we will go to the elevator. It is not quite inducing that trip through the interior of a high chimney, and a dark one as that. A box with space for 15 or 20 people, lifted by a steel-cable, lifts its passengers from down town and transports them to the top of the mountain, a parody to that diabolic scene of the Temptation of Jesus.

This trip is made in a few minutes, and when the passenger gets out he finds himself in a pretty square, on the top of the city, wherefrom a beautiful panorama of the whole bay and the blue islands beyond is to be seen.

In front we see a beautiful building — the municipal Palaee — of some architectural value and a national relique. It is an inheritance from the metropolis. It was spoilt by the Dutch in 1636, afterwards repaired and recently rebuilt being added to it a four face tower with a clock ended by a piramid in sections. The principal face of the building has a pretty effect, open in arches on the square. There are in it several sections among which is a public library established by Mr. Paula Guimarães when mayor of the city.

The right side of that palace looks to a narrow street called Visconde de Rio Branco, the inclination angle of which, just like

that of the other streets of S. José district, is not one of the least interesting curiosities of the old city.

Forming an angle with the municipal Palaee, there is another large building, also of historical origin, having been the residence of Portuguese governors and of all the presidents of the ex-province. It was rebuilt for the same purpose, but entirely built anew, everything but the foundation having been pulled down. In this palace is established the Government of the State, and another builting



Bahia. - Municipal Palace

ding, in Corredor da Victoria is the one used as residence of the governors.

From this square run to the right and left some very narrow lanes, 300 years behind the age, as the Chili, Misericordia and Assemblea streets invariably lined by plain buildings. The Chili street which runs in an inclined plan, ends in a bright and picturesque square which is divided into two small gardens, in one of which, right in front of S. João theatre, just at the sea side, is the statue of Colombo on top of a pretty marble fountain.

It is charming the situation of this public square, called Castro

Alves, some 50 metres above the bay with a wall with railing and streets with benches. That part of the mountain, transformed into a fantastical stairway, whose degrees are the Montanha and Conceição streets open in longitudinal direction in the hillside under the uptown part of the eity. On the land side there are large buildings surrounding the square. They are the Paris and Sul Americano hotels, the *Diario da Bahia*, a daily newspaper, a large building of a pretty but trivial style.

If we take a tramway, one of those crossing the town, to go to Graça, for instance, we have the opportunity to see quite a different section of the city. In this line the tramway-cars are driven by mules



Bahia. - Palace in the Victoria Street, Governors' residence

and it is not without difficulty that they go up the steep hill that separates Castro Alves square from that group of streets preceding the pretty public square ealled *Piedade*. Having gone up that tortuous neck called Carlos Gomes street and those that follow it, we are at Piedade. Excellent buildings, mixed up with some quite modest ones, line the wide public square, the centre of which is a pretty garden surrounded by railing, with beautiful flowers and green grass, with a nice band-stand, and in the centre an artistic marble fountain having on top a native symbolism — an indian stepping on a serpent.

One of the sides of the square is formed by the Piedade Church, one of the prettiest ones in the North, with its polished dome, a miniature of that of Santa Maria dei Fiore. In the other angle we see the pretty Senate building, of Italian style. Following in the tram-

way-car and leaving at the right the Police Department Headquarters, we go through a pretty street not altogether straight, but all of it lined with fine buildings, in which they insisted in following the Portuguese architectural style, however, here and there, appear some transformations under a preoccupation of more advanced art, and the new and modern buildings are giving to the Pedro Luiz street the healthy and joyful aspect it presents.

Further ahead is a charming public garden, the Passeio Publico, a sweet place to rest awhile sitting under the delicate perfume of the mango trees, with widely spreaded out branches that prevent the



Bahia. - Senate building

sun light from shining upon the sandy ground of the garden streets. It is pleasant to walk under that ancient canopy that an old and noble count planted for us to enjoy, with all that perfumed scent of the flowers flooding the atmosphere and the murmuring sounds of the foliage whispering a primitive but delicious symphony.

The lawns and the foliage of the mango and other trees do not fill all the silence of the park, there is quite a large spot covered with shining tiles forming a kind of terrace just a little above the level of the street, surrounded by a varandah with mythological marble looking upon a deep and ample horizon. The straight and open perspective, the inundating light, the picturesque of the first plan where the city begins to appear, the mute company of the wandering butterflies showing us what is true happiness in their free flight, wi-

thout boundary lines and without a time table, — here is a picture worthy of the envy of that king Louis of Bavaria.

In another open spot of the park, in a stretch left free by the mango trees, the past generations commemorated the arrival of D. João VI to Brazil, erecting an obelise in the shape of a pyramid

made of Lisbon marble with an inscription engraved in golden letters.

In the Afflictos square (curious name given after a catholic church built there) where the Passeio Publico ends one of its sides, there are the thick walls of a large Portuguese fortress looking like a Bhudist church. This fort is now transformed into the barracks of the Police force, for which service the necessary adaptations were made.

A tortuous inclined street paved with large stone blocks runs down following the lines of the inferior plan of the Passeio Publico almost masqueraded by the irresistible vegetation of the inclination and leads



Bahia. - Monument of the Riachuelo square

to the Gamboa fortress — a colonial fortification at the bottom of the mountain half hidden by the rolling waters.

* *

From the S. Pedro fort square follows a bright street, quite a busy thoroughfare, passing by the Polytheama, and leading to another square, the best one in the Capital, formerly named Campo Grande. This square has a pretty garden decorated by a noble bronze and marble monument of large size and fine artistic expression, commemorating the historical event of *Dois de Julho* (the second of July) which sealed in Bahia the consummation of the national independence of Brazil.

It is peculiar that in the Capital of Bahia there are no statues or monuments of an individual character, (excepting the bust of Dr. Paterson, an English philantropist, and a physician of a most charitable disposition, devoting himself to take eare of the poor). Be it due to chance or to consciencious deliberation, the fact remains that all the monuments erected by the people of Bahia, in the squares of its pretty Capital, refer to some national fact and they represent



Bahia. — The pyramid of the Passeio Publico

allegories and symbolisms or some allusion in a collective and generic sense.

This monument Dois de Julho is composed of a high column corynthian style with the traditional Indian on top dominating the despotism, represented by a dragon. Colossal bronze figures representing the big Brazilian rivers, with several other decorative accessories complete the monument which is one of the nicest in Brazil.

The square built upon an horizontal plan, has the shape of an irregular square and the space between the lateral streets is a pretty garden, quite large though not so beautiful as those of S. Paulo and Belem.

There are some very fine buildings in the square, and the streets starting from it are elegant ones, with modern buildings. Among them the visitor must not forget the Corredor da Victoria, where there are pretty mansions, and it is the favorite residence street of the wealthiest part of the population. There is also the palace that is the private residence of the Governor.

Going ahead we come across another square, without any garden as yet. There is the Church of Nossa Senhora da Victoria, which, they say, was built in 1530, and further ahead yet we see Graça Square, notable because of the church that is there, belonging to the Benedictine monks, and which they say stands in the same place where they first formed the city in the sixteenth century.

From there new streets start, as well as an inclined avenue lined with bright houses with gardens and modern palaces.

But, for us to come to this place so quickly it was necessary to

leave aside other parts of the city of no lesser interest than this one. The Nazareth district, with a large square, the garden of which is in way of construction. It is surrounded by fine comfortable residences and has much to be seen. There is a trade school directed by Salezian priests and the Misericordia (the city hospital) which is one of the nicest of its kind in Brazil.



Bahia. - National Independance Monument. Duke de Caxias Square

On the other side, coming down through a valley, between the hills on which the city is built, we go through a long street, paved with little eare. It is Rua da Valla (as that place was the bed of a ravine which had to be filled up). That way we reach a topographical neek known as *Baixa dos Sapateiros*, a place of considerable transit. There, are always people crossing in all directions.

Every minute tramears start in the direction of the four angles of

the city; from the market, which is situated in front, there comes a noisy crowd, joyful with a free and easy air through the many doors of the building; the noise of wagons and trucks running in all directions is heard all day long, here and there the newsboys ery out the names of the papers, and thus from sunrise to sunset, every day of the week except Sunday, this place is kept quite alive and noisy.

We take one of those tramcars (there are very few cabs and carriages) and we take a ride to see what is going on in the other part of the city. After half an hour of zig-zagging we are in an enormous field



Bahia. - S. Bento Street and Convent

all covered with grass and surrounded by buildings on all sides. It is called Barbalho field.

At one of the sides of this field, looking to the bay is the careass of an olden times fortress, built in the ages in which it was indispensable to have the place lined with these protective structures.

We will not attempt to describe the whole city with its many sections and surrounding suburbs. Another volume like this one would be necessary for that

Let us pay a visit to the buildings worth noting.

Among the churches, which are in great number, there is the S. Francisco one, of monolithic style of architecture both in its

BAHIA. — THE CATHOLIC CATHEDRAL AND QUINZE DE NOVEMBRE SQUARE

front and in the other parts of the building, this being the peculiar style of the temples built by the Franciscan monks. In its exterior there is nothing worth admiring, and it suffices to say that it was built in 1713, an epoch of complete decadence of the building trade and artistic architecture among the Portuguese. In its interior, however, no lover of expontaneous art, visiting Bahia, must go away without paying a visit to this church. Besides the cloister with those colored tiles, style of that time, with drawings of biblic episodes, just as in the City Hospital of Rio de Janeiro, there is the high relief work on the rich wood of the country, partly gilt covering the walls and ceiling of the church not only in its main nave but in the lateral chapels.

That interior of the church, the whole of it, is an admirable manifestation of art on the basis of a touching religious spirit, and even to-day, those reliefs with flowery curves, coats-of-arms, angels heads, birds and spiral lines columns put in vibration all our nerves of aesthetic emotion.

That valuable treasury of retrospective art was deplorably threatened with deterioration, when a group of German monks, all of whom are Brazilians to-day, took charge of the convent, and restaured it with care worthy of the gratitude that impels us to register here that fact.

Another curious church, is the Collegio. It is a document of the degree attained by artistic architecture among the Jesuits of the Portuguese colonial times in Brazil. This church was built before 1572 what is hard to believe. It was built by the Jesuits to serve as a college for them. That is the reason why even to-day the church has that name, having once been elevated to the honor of Cathedral of the primate of all catholic Brazil.

Its front, though of a turgid style, with wide lines and massive ornamentation, is imposing to a degree of making one's mind grow torpid and listen to its old and rude tradition. This church is of stone and we can't deny a certain harmony in the whole of its structure. In its interior, all the details of ornamentation, from the design of the main altar, to the work in the ceiling, perhaps the most curious of all we have seen in Brazil, are worthy of study and leave stupified those who have artistic vibrating soul.

The Benedictine monks also built a pretty church — S. Sebastião. — Clever men they are, proven as it is by the splendid location of all the convents they have built everywhere, the monks of S. Bento selected a spot of very first order, within the city upon a central eminence.

It is a church all white, inside and outside, from the candor of the main altar marble to the Saints images, of snow-white Carrara marble, the two open towers supported by white pillars, and white, likewise, is the pompous dome which is the highest spot of the city.

There are yet a large number of catholic churches, some large and well built, as the Matriz church, Sant'Anna do Pilar, and others of smaller importance as to the point of view of art, though noted by their historical value as the one of Nossa Senhora da Ajuda which is the oldest of Bahia, and others. Those we mention above are the most important.





Bahia. - Fine Arts College

Public Instruction. — The State of Bahia has been one of those which have better understood the responsibilities belonging to the title of State, given by the republican Constitution to the Brazilian provinces. It is thus that it deemed to be its duty to apply a good part of its income to the diffusion of Public Instruction.

The budget of the ex-province appropriated about 600:000\$000 for public instruction. In 1897 the State Government spent a little over 1.000:000\$000, and at present it spends over 2.000:000\$000, the State contributing with 1.800:000\$000 and the municipalities with 300:000\$000.

In the State of Bahia the distribution of elementary teaching is in charge of the municipalities. The State, however, gives a subsidy of 800:000\$000 to the poorer municipalities, thus contributing even with more than the double of what the nunicipalities themselves

spend. About 1.000:000\$000 are spent with different institutes: Gymnasio da Bahia, Normal Institute, Law College, Normal Colleges Caeteté and Barra, Agriculture Institute, Fine Arts Academy, Music Conservatory, and State elementary schools, and subsidies to the Polytechnical Institute and Lyceum of Arts and Trades.

In the State there are to-day the following institutes of secondary and superior instruction: Medicine Academy, established by the imperial Government, and with a just reputation firmed by the notabilities that have come out of that college to follow the medical profession in other cities of Brazil. It is installed in a fine building, much better than the building of the medical college in the Capital of the Republic, it has magnificent laboratories, magnificent scientific material and good electric installation.

The Fine Arts College, is a beautiful building, though situated in an inclined street. It has many students, it has a beautiful picture Gallery and sculpture exhibition, and a Music Conservatory is annexed to it.

The Fine Arts College building is a large one, with three floors in the main bodies of the structure, and of Italian style.

After the Rio de Janeiro one, (capital of Brazil), the Bahia College is the oldest, and magnificent results have been obtained.

The Law College was founded after the proclamation of the republic. It is in a building of its own, of fine construction and nicely located.

The Agricultural Institute was founded by the imperial government and is in the district of S. Bento de Lages not very far from the Capital.

The Normal College is a large building. It prepares teachers of both sexes. The training is the very best, and it is quite common for those who receive degree there to be prefered for high pedagogie functions in other States. In its large building there are scientific eabinets and pedagogic museum, everything prepared with nicety and even somewhat luxuriously. Annexed to it is the *kindergarten* and complementary classes for practical training.

There are two other establishments of this kind, somewhat more modest, in the cities of Caetéte and Barra do Rio de Contas.

The Bahia Gymnasium, is an institute just like the National Gymnasium of Rio de Janeiro. It is in a beautiful building erected by the ex-governor Luiz Vianna, in one of the city public squares. It has a good museum and library.

The Gymnasium S. Salvador, is a first class institute, but is maintained by private people. We mention it here because the examinations passed there have the same value as if they were passed in the National Gymnasium. It has a fine building of its own and has a good reputation.

The Lyceum of Arts and Trades, is an institute of which Bahia is proud. It was founded by private initiative as the Rio and Recife ones. It has about 2.000 students, class rooms for languages and sciences, several workshops for practical training, an excellent library, picture Gallery, museum of architecture, a band of music, etc.

There are yet other establishments of public instruction as the Archbishop Seminary, the Salezian College, the Santa Thereza Educandario, the two latter ones subsidized by the State, the Spencer College, the S. Joaquim College, the Sete de Septembro College, the S. José College and many other private establishments.

Several libraries and reading rooms complete the instruction service in this State. The Medical Academy library has 15.000 volumes; the rich Public Library founded in 1811 by the Conde de Arcos, has 20.000 volumes; the Municipal one, founded by Paula Guimarães when Mayor, has 14.000 volumes; the one of the Gremio Litterario has some 10.000 volumes; that of the Gabinete Portuguez has 10.000 volumes; the Benedictines one, 5.000; the one of the Lyceum of Arts and Trades 12.000; the one of the German Club, 3.000. There are many libraries all over the State. There is no city of any importance without having a library, most always belonging to private societies and Clubs, but open to the public.

In short, there are in Bahia 56 Colleges, Academies, Gymnasiums, etc. and 951 Grammar schools thus distributed:

Colleges for superior, technical and professional Instructoi	n.		14
Secondary instruction colleges in the Capital			33
Colleges in the interior of the State		٠	9
Elementary schools (of the State			128
» » (of the municipalities)			722
Schools maintained by private individuals			94
Schools maintained by religious creeds propagandists		٠	7
Total			1007

Adding to this the number of private schools of the modest kind to be found here and there, in the interior, we will have a total of no less than 1.100 instruction establishments in the State.

* *

Police force, land and sea transportation. — By the organization of its public services Bahia occupies a first class place in

the Brazilian Federation. Its police force is, as the Pará, Manaós, S. Paulo and Rio Grande do Sul ones, organized in such a manner that in normal times it fulfils the duty of maintainers of the public order, and in ease of necessity, serves as reserve of the federal army.

It is divided into four infantry battalions with 2.000 men and a eavalry squadron with 300 men. They have Mauser and Comblain guns and Nordenfeld rapid fire guns. Their uniform is simple, of dark cloth, just like the one used by the Pernambuco police. The privates police the streets, armed with sword and the commander of



Bahia. — Electric Iramway station

the forces is a colonel. The regiment has two barracks, large and nicely kept; one is in the Mouraria square in front of the General Headquarters of the federal garrison, the other, near the Passeio Publico, is a magnificent type of a building of its kind, having no better ones excepting in Bello Horizonte, S. Paulo, Porto Alegre and Rio de Janeiro.

The municipality maintains a well organized fire department.

We will now write something about means of communication.

Bahia, being a State with relatively many cities (has 165 municipiums and about 100 eities and villages), had the necessity of a wide net of railways, but unfortunately does not possess it, as it happens

all over Brazil where railways are never in the proportions of the requirements of progress.

In the Capital the tramway service is made by several companies: the Linha Circular, the Trilhos Centraes, the Transportes Urbanos, the Ferro Carril Ondina (in way of construction) and the Carris electricos, which, as the name indicates is moved by electricity. All the principal districts and arteries of transit, are served by tramcars, and a great lack of public cabs and carriages is noted. We can't very well understand this, considering that the population of the city according to the census taken in 1900 was 205.813 inhabitants, and to-day, probably some 220.000.

In compensation there is that curious construction of mechanic elevators, some through an inclined plan as the «Ramos de Queiroz» and the one of «Graça», others in vertical line, like the ones of Pilar, Taboão and Lacerda, all moved by steam. These interesting works of art of which no other Brazilian capital had necessity (there being but a short inclined plan in Rio), for its city transit, Bahia had to build that in large number because of its peculiar topography.

From the Capital starts an extensive railway till Joazeiro, a new city on the S. Francisco river banks, with branch lines running to Timbó, etc. We will now give a list of the railway lines running in this State.

The capital is in communication with cities in the far away points of the bay and of the sea coast, by means of the steamers of the Bahiana Company, an old navigation enterprize maintained by Brazilian capitalists, and by sailing boats. These boats are another typical peculiarity of the local life of Bahia. They can never be confounded with other types of naval construction as to their shape. They form a unique gender of their own. They are built in a somewhat primitive style, in private ship-yards, of which there are a great number in the bay and little rivers of the interior.

Another navigation enterprize, the « Viação Central do Brazil », runs between Joazeiro and the cities of the States of Bahia and Minas on the banks of the S. Francisco river. It has eight or ten small steamers and the seat of the company is in Bahia.

The commerce of the Capital, internal as external, is very active and one of the most important of Brazil. It is true that in its vast bay enter every day large foreign transatlantic steamers, ships and steamers from everywhere, besides the national steamers engaged in the coastwise service. From there sail also for the North and South, as well as to the interior points in the bay, every day, the steamers of the Companhia Bahiana.

The number of ships entering that port during 1901 was 620 with 8,000 passengers. The number of ships sailing was 620 with 7,600 passengers. In 1903 entered 686 ships with 39,065 passengers and sailed 679 with 33,416 passengers.

In this is not included the coastwise navigation which was in the same year 706 ships with 14.957 passengers entering the bay, and 704 ships with 14.784 passengers sailing.

Here is a list of railways existing to-day in the State of Bahia and their extensions in kilometres:

Railway entreprizes					Kiloms.
Bahia ao S. Francisco					576
Ramal do Timbó					82
Estrada de Ferro Central .					320
» » Santo Amaro					56
Tram Road de Nazareth .					99
Estrada de Ferro Bahia e Min	as				142
Santo Antonio a Amargosa .					65
Centro Oeste da Bahia					26
S. Francisco a Feira (in const	ru	etio	n)		65
	T	`ota	í.		1.411

* *

HYGIENE AND CHARITIES DEPARTMENT. — The hygiene and Charities Department services have been largely improved in Bahia during the last few years.

The Central Board of Health has several branch departments nicely established, as the isolation hospital, the disinfection department, and the vaccinia institute.

The prohylaxy and disinfection services are executed just as in Rio de Janeiro and S. Paulo, with first class material, of every description. There is a magazine published to disseminate every fortnight demographic statistics data, and all the information in relation with the sanitary conditions of the city.

Bahia completes its service of public aid, giving subsidies to large establishments which render public aid both in the Capital and in the interior cities.

We will mention some of them:

The first worthy of mention is the Hospital da Misericordia, (eity hospital) named also « Santa Izabel hospital », with a service identical to that of the Rio de Janeiro eity hospital.

There is all comfort in this hospital as well as all the conditions recommended by science. It was built ten years ago, thanks principally to a valuable inheritance willed for that purpose by the Count Pereira Marinho, whose statue, in marble, is in the pretty garden, right in front of the building.

The Asylo de Mendicidade, (the poor house), is the most imposing and luxurious of all the poor houses in Brazil. There is hardly any city in Brazil that has not built a house for its poor, but none has done so well as Bahia in this regard. Bahia has built a palace for its poor. It was built in a charming sea-shore place called Bôa Viagem, and is surrounded with gardens and marble. It is a white building



Babia. - Large Textile Manufactory da Boa Viagem

with statues on top of it, and in fact, it looks more like a summer residence than anything else.

The Asylo dos Lazaros, (the leprous hospital), is another institute of charity also receiving a subsidy from the State Government. It is a large building in a pleasant district called Quinta, as it was there that the Jesuits had their recreation Quinta (farm).

The Insane Asylum is not a building so large as the Rio one, neither is it so modern as the Pará one, but is taken great care of. It is located in the beautiful sea-shore place, Bôa Viagem, and was inaugurated in 1874.

There are other hospitals and Asylums, as the Military Hospital, the Foundling Asylum, etc.

* *

Production, commerce and industry. — The question a lourist generally asks as he goes for the first time to a place is: What does this place produce? — But the visitor in Bahia ought to invert the order and ask: What does Bahia not produce?

In fact, just like in Rio Grande do Sul, Bahia is a city which can supply itself without outside aid, because of the rich variety of its culture and production.

The soil rich, fertile, has everything all the other States of Brazil have, Gold? Yes, it has mines now being exploited — those of the Assuruá and others which are going to be exploited, - and what is more, with Brazilian eapital. Mangane? Of, course. It is not Minas alone that exports this rich mineral. Bahia is doing so. Last year exported some 40.000 tons to begin with. Diamonds? Why not? In Bahia are the richest and most famous layers of diamonds in America. Every one remembers the noise made about the discovery of some mines in Salobro, in the district of Cannavieiras. One of the cities of the State is called « Lavras Diamantinas, » (diamond explorations,) because of occupying a certain region where they do nothing but search diamonds. Copper? There is also copper in Bahia, and this State is to-day a competitor of Chili in the eopper market. They have discovered an enormous layer of this metal. A Belgium syndicate was formed, so the papers say, to begin the exploitation of that treasury. The American consul, Mr. Tourniss, not long ago wrote this in one of his reports, speaking of the layers of diamonds in Bahia:

« The largest diamond earbonate ever found was discovered in the district of Lencóes, in 1895, in a mountain rock which had been exploited some time before. It weighed 3.150 carats and was sold by the miner for 80:000\$ (at the exchange of that time being the equivalent to £16.000). One quarter of its price was paid to the owner of the concession for the exploitation of the ground where it was found. This stone changed hands and was at last bought by an exporter of the Capital of Bahia for 121:000\$000 (equivalent to £25.400 at the exchange of that time). It was sent to Paris where it was divided into smaller stones, to become more marketable.

Another good find took place in 1900, in another concession ground of the same owner. The diamond carbonate weighed 577

earats and was sold by the miner for 79:000\$000 (at the exchange of that time equivalent to £17.380), the miner, as in the preceding case had to give one fourth of its price. The average size of the diamonds found is 6 carats.

The diamonds found in Paragnassu are not so clear neither so perfect as those of Cannovieiras but are reputed as having more brilliancy. They appear mixed up with the carbonates and often contain small particles of non-crystalised coal what diminishes their value. »

Mr. Hen. Praguer, an engineer, wrote an article in a newspaper ealled A Bahia, saying:

« Generous nature offered to Bahia extraordinary riches, coming from certain minerals which of all this world can only be had in Bahia, as there are the carbonates of the Chapada Diamantina, the rich sands of the Prado, the famous and celebrated tauá of the bay, and finally the soil and under-soil of the large and important city of Bahia with enormous depots of fuel, composed of anthracite and bituminous coal. »

The failure of the company organised for the exploitation of kerosene oil in Marahu, failure that earried with it the loss of an enormous capital, gave cause to strong a spirit of prejudice among the capitalists of Bahia, so that, they have allowed the exploitation of the wealthy under-soil to fall in complete abandonment.

The most recent of these exploitations is the one of the celebrated monazitic sands discovered as prodigious wealth in the shores of the city of Prado at the sonthern part of the State.

Let us say something about the vegetable wealth of the State. They are not inferior to the minerals in their wealth, The piassava, the eocoa-nuts, the rosin, the exquisite lumber, the cocoa, the tobacco, the sugar-cane, the coffee, the grain, everything appears in the list of the exports of this State.

During the first nine months of 1901 Bahia exported goods valued in about 61.000:000\$000 and its imports were valued in about 24.000:000\$000. It occupies the fifth place in the list of the largest exporting States of the country.

S. Paulo (i	impe	rt	atio	n a	and	ex	poi	rtat	ion).		576.060
Federal Ca	apit:	Ł										310.637
Amazonas					٠							99,900
Pará												99.800
Bahia												86.700

Products exported by the State of Bahla (1n kilograms)

Years	Sugar	Tobacco	Cocoa	Coffee		
1891	7.142.160	26.400.880	5.028.720	9.499.620		
1898	6.148.233	51.856.852	9.087.074	25.792.951		
1901	8.770.464	34.612.311	15.524.765	25.281.980		

The other merchandises which increase the total of the exports from Bahia, though in a smaller scale have followed the same yearly ascendency:

Vears	Skins (one)	Piassava (bales)	Rubber (Arrobas) (15 kos. each)	Minerals kilos
1886	171.524	296.564	3.437	28.000
1891	212.858	268.849	2.559	316.410
1896	256.999	578.519	3.742	1.212.219
1901	307.584	271.084	52.865	1.617.960



General view of the «Pitanga» sugar factory, in the Matta of S. João municipium

As to manufacturing industries with the exception of Rio, São Paulo and Rio Grande, no other State exceeds this one in number and importance of its factories. We will not speak of the extraction and forest industries (piassava, cocoa-nuts, etc), neither of the dairy industries, nor eattle raising. The State is a little backwards in this line, though they have just established practical acclimatation institutes — the model cattle raising farm, at the Catu, and the vine experimental school in Joazeiro, — we will write, however, about the manufacturing industries, though in a cone ise way.

The sugar manufacturing industry is falling somewhat in Bahia,

though there are 1.800 manufacturing places by primitive processes and 21 large steam ones. But sugar at the present low prices doesn't stimulate production, and farmers are perfectly discouraged, and limit themselves to produce for the local consumption.

The sugar farms and factories in Bahia are, as a rule, factories of some importance, with improved apparatus. Among them we must mention: the one of S. Bento de Inhatá, the chimney of which is 36 metres high and is the pride of Santo Amaro district. It grinds 15.000.000 tons of sugar-cane each crop. It is owned by Mr. Pedro Alexandrino, and its water reservoir, has 200.000 square metres, and is one of the beauties of the place always visited by the tourists.

The Pitanga sugar mill owned by the Barão de Assú da Torre, with a steam railway and large machinery has capacity to grind 10.000.000 tons of sugar-cane.

The Rio Fundo one owned by a company, grinds 30.000.000 tons, occupies large buildings, has its own railway and is located in Santo Amaro.

The Alliança, also in Santo Amaro and owned by Sá Ribeiro et Co. grinds 15.000.000 tons sugar-eane; it occupies gigentic buildings, dominated by a 31 metre high chimney.

The Conceição sugar mill and alcohol distilling place owned by Dr. José Marcellino, Governor of the State, located in the Nazareth municipium, grinds 12.000.000 tons a year.

The Model distillery occupies a group of ample buildings, producing 100.000 easks of brandy and alcohol.

The sngar mills: Iguape, near the city of Cachoeira; Bom Successo, Capimerim, Malembar, Carapiá, Passagem, Esperança, Maraeangalha, Colonia and Botelho, all of them moved by steam, with railways and improved machinery and in Santo Amaro district. Pojuca, in Matta of São João; Aratú, in Santo Antonio and Agua Comprida in the capital municipium, as well as several others, some belonging to farmers and some to companies with seat in Bahia, — are so many other factors towards the progress and industrial activity of that section of Brazil.

There are, besides this, other industries both in the Capital and other cities of the interior. There are 141 factories, large and small. Of these, 12 are threading mills, by steam, and 2 hydraulic ones, 12 cigar and 6 cigarrette factories, 5 iron and bronze foundries, 2 ice, 12 oil, 3 shirt, 5 candle, 3 chocolate, 3 locks, 2 artificial flowers, 2 church ornamentations, 3 chemical products, 5 furniture, 4 car, 2 glove, 3 paper boxes, 10 trunk, 6 broom, 3 grease, 13 soap, 6 perfumery, 1 confetti, 3 mineral, 3 biscuit, 6 coffee, 11 vinegar, 1 matches,

3 mucillage, 21 tile and brick, 14 lime, 1 piassava, 5 grain, 2 italian mass factories, 4 skin tanning ones, 4 breweries, 4 cordials and other drinks distillers, 2 diamond lapidating works and many others like saw mills, bags and nets, umbrellas, flags, blank books factories, ship yards, brick factories, foundries, preserve factories, vegetable coal, oils, shoes and other manufacturing concerns.

Among the monuments of industrial initiative in Bahia, we must not forget the large manufacturing company, Emporio Industrial, at Bôa Viagem sea-shore. It is one of the largest threading mills. It has about 2.000 workmen, and all the necessary institutes needed to better the condition of the workingmen: cooperative-stores and societies, schools, savings bank, houses, gardens, amusements. The founder of this small world, where all modern ideas of philantropists towards workmen are practiced, was Luiz Tarquinio, a Brazilian who died there not long ago.

Another concern worthy of note, belongs to the director of the Banco da Bahia, Commendador Sousa Campos. It is composed of vast Salines at a short distance from the Capital, in a place called Margarida, with all requisites and modern European appliances for salt manufacturing.

It is one of the largest South American industrial establishments, and its products meet ready sale.

The great graphic arts establishment, Reis et Co, one of the best of its kind in Brazil, is another establishment worthy of being visited. It is situated down town in the Capital.

There is also the large furniture factory, Marcenaria Brazileira, the products of which can be compared favourably with those imported from Europe, being much superior to the latter as to the quality of the wood employed.

* *

OTHER CITIES OF BAHIA. — Those who wish to make a correct judgment about the importance of the State of Bahia must not limit themselves to the examination of its large Capital. They must go to the interior, visit the cities spread through the S. Francisco river valley, those hidden there by the river side as if forgotten and also those interned in the interior of the State.

Cachoeira. — In a low valley of the Paraguassu river, extended through its left bank, full of niee houses, churches and pretty shops and stores. It has 50.000 inhabitants, 6 public squares, 50 streets, connected by a railway with São Gonçalvo de Campos, S. Felix, Cur-

ralinho and other places. It is also connected, by steamers sailing daily, with the Capital. It has a colossal bridge, built on stone pillars and connecting it with S. Felix. It has a large threading mill, three eigar boxes factories and several others manufacturing mucillage, vinegar, soap, candles, distilling works, sugar refineries. It has yet good hotels, daily papers and other periodicals, telegraph, telephone, elubs, libraries and a city hospital.

S. Felix. — It is not as large as the one just mentioned, but has this peculiarity: it is, we might say, the whole of it a cigar factory. It is like some of those European cities that monopolise a certain industry. It got used to improve eigar manufacturing and does nothing else. Among all those large eigar factories there is one, which is the largest in South America. It is the property of Geraldo Danneman, whose products can be seen in every eigar store of the country.

The population of this place devote themselves to the cultivation of tobacco, its manufacture and exportation. Those who are not employed in those large factories, as Danneman, Simas, Cardoso, Milhajes, Roedenburg and others, are at home working on their own account.

The buildings of this busy city are not so pretty as those of its neighbor. It is also on the banks of the Paraguassu river stretching itself almost in one street only. The City Hall was planned by an architect of Bahia, Mr. H. Schleyer, and is a beautiful building.

Santo Amaro. — It is another city of about 85,000 inhabitants. The buildings show that formerly Santo Amaro was quite an important social centre full of enthusiasm and life. The city has the curious feature of embracing the river, narrowing it between its streets filled with ancient style mansions, covered with colored tiles imported from Portugal, villas and other light cottages. A large church, the pride of that region, is standing in the Purificação square where also are the City Hospital and City Hall, solid and strong as everything that was formerly built with the first money earned with sugar cane plantations.

In another square is the theatre, a building hardly worth mentioning and the Poor House, with a school for girls founded in 1813. There are tramways in the city, as well as water supply, railroad, hotels, factories, foundries, public illumination, everything that can give importance to a modern city. A few leagues away is the «Instituto Bahiano de Agricultura » supported by the State.

In the suburbs of Santo Amaro are some farms with beautiful panoramas, and through the municipium there are saw-mills, sugar-factories, distilling works, where they work day and night, and others.

NAZARETH, MARAGOGIPE AND ARATUHYPE. — These are other growing eities, each of over 20.000 inhabitants, with factories, schools, clubs, newspapers, etc. They have daity communication with the city by steamers.

Feira de Sant'Anna. — Is built upon an esplanade of beautiful horizon. Its landscape is the prettiest of the North of Brazil with its



Curralinho. — Dionysio Cerqueira Place. — Popular Holiday

streets straight and wide as the Senhor dos Passos, and Direita streets. The fact of this Direita Street (straight street) being really a straight one surprised us. In nearly every city there is a thoroughfare with this name being generally the most tortuous street of the town.

It has fine private and public buildings. The City Hall, the theatre, the Railway Station, the magnificent City Hospital and Girls Asylum. Its name was given after those colossal country fairs, cattle exchange, that used to be held there before there was any railway. Ten to twelve thousand heads of cattle could then be seen there. There are four steam factories and other smaller ones manufacturing vegetable oils, tobacco, soap, ropes, tiles and other products.

The principal commerce of the city has as basis tobacco and its preparation, there being 13 business houses by wholesale and 86 retail houses. It also exports hides, lumber, grain, etc., in smaller scale.

It is a city of much future, with 64.000 inhabitants according to the last eensus and dates, only from the time of the political independence of Brazil.

Curralinho. — Known also as Castro Alves, because of having been the birth-place of the great Brazilian poet of that name. It is



Alagoinhos. — Paço Municipal (square)

also a city with a bright future, built on the top of the Sairiri mountains, and we must say, well built. It has 20 large streets, four public squares and fine houses.

ALAGOINHAS. — Here is another city owing its existence to the locomotive. Formerly there was a kind of a hamlet with that name a short way from the place where this city is now. With the arrival of the railway-bridge of the Bahia to S. Francisco railway, there was formed a nucleus of houses, by and by a small hotel, a church, a school, later on business houses of certain importance and soon we saw formed a beautiful city to be added to the number of the 40 Bahia State cities.

Alagoinhas grows every year, and is already a good city of commercial activity. It has a public square, Paço Municipal, two railway stations, a large market, pretty churches, eight public schools, several clubs and hotels, soap-factories, brandy distilleries, soda-water works, leather tanning factory, a newspaper, etc. Its population is 32.276 according to the census taken in 1900.

From there starts a railway to Timbó and the prolongation line to the S. Francisco river, crossing the cities of Bomfim, Serrinha until Joazeiro.

The region crossed by this railway is most interesting with variegated and exquisite panoramas one after another. At the beginning endless tobacco plantations of small farmers intermingled with corn and other cereals. The road goes through two green bands, where the tobacco comes in line with small plants of one to two metres. Afterwards near Bomfim, formerly Villa Nova da Rainha, we enter a stony region in which predominates the Itauba mountain (an enormous stone) rich in the variety of stones among which are the rosy ones, compact, which have already been utilized for monument making in the Capital. A little further ahead is the city of:

Bomfin. — This city has some 1.200 houses, 26 streets, 5 squares and looks like a hamlet built by chance with cross and tortuous streets. Yet the houses are pretty and new, as the city is not an old one.

Following the railway we find extensive open fields, with a peculiar vegetation, the cactus predominating. There is even a stretch of some kilometres of surface, where we can contemplate the imposing panorama of a forest of cactus, with thousands and thousands of specimens firmly standing up displaying their pretty green colors. The bottom of that picture is the naked body of the mountains in the neighborhood, a sad landscape with those broken lines of the monstruous rocks.

Serrinha. — Among the places that line the road before Bomfim, some are of some importance, as Queimadas, Santa Luzia, etc. Serrinha is a city of right. As its name gives to understand it is located in a small mountain. Right at its entrance there is a pretty hotel, indicating that, being a new city, (it is another creation of the railway), very little worth noting can be present. Its houses have as a rule only one floor, only lately some being built with upper stories. The main public square is the Praça Manoel Victorino.

JOAZEIRO. — After the Bomfim station, five hours of train ride, we see Joazeiro, on the sandy banks of the S. Francisco river, and

where from a beautiful panorama can be observed. In front of it is a city belonging to Pernambuco State, the white houses of which, there at the bottom, give a strong relief to the small Fogo island (Fire island), situated between the two cities. Petrolina is the name of that little gem, connected to-day by a telegraphic wire, carried over-head by a high post on the island and that thus helps to unite the thought of two cities that the river in vain tried to separate.

Joazeiro has grown up considerably after the railway reached there. It has 22 wide streets running in the direction of the axle of the river, crossed by several other side streets and public squares. A



Joazeiro. - The railway station of the line Bahia to S. Francisco

pretty building is the railway station of this city. The City Hall is also a solid and large building. There are also two club houses, a library, a music school, some churches, a small theatre, and several good commercial houses to give life to the city. The houses are of modern construction, and among them are some of noble aspect. The seat of the Viação Central do Brazil, — which takes charge of the navigation on the river and its affluents, — is a large house, not a very pretty one, painted white, a little ahead of the station, having annexed its repair shops. The street lining the river is full of business houses, but as it happens in every city of Brazil it is not overcrowded.

Three or four kilometres from Joazeiro is a large establishment devoted to the experimental study of vines, directed by Dr. J. Silveira an entomologist and ethnologist of repute.

All I that region margined by salinitrous ground, produces excellent vines, with four crops a year, and the scientific establish-

ment has as its object to direct that new agricultural industry.

The wheat and the vine prosper wonderful in this region. Lumber, eattle, apples, peaches, everything is produced there, promiseuously with the equatorial plants, so as to place in disorder those notions accumulated for centuries about elimatology.

So that nothing be lacking, a few leagues away from Joazeiro in a place called Sobradinho, the river arranged some high falls, and in the near future all the neighboring eities will have power, light and heat without needing a single ton of fuel.



Valença. - Large textile Fabric : « Todos os Santos »

Let us leave alone this region the future of which is depending, as we said before, on the immigration, the European blood and intelligence.

We will give a jump back to the Capital and will take a coastwise steamer to visit the sea-side cities. We will go first to Valença, the industrial city as it is called.

Valença. — At seven kilometres from the bay of Tinharé, on the banks of a small river, the *Una*, is one of the most interesting eities of Bahia, — Valença, — with 24.957 inhabitants, 2.100 houses, 81 larger buildings, 26 streets and 5 public squares, with pavements

and illumination, partly electrical, partly with kerosene oil, two large factories, (threading mills), two saw-mills, water supply, newspapers, telegraph, breweries, fruit-wine factories, soap ones, cordial distilleries, candle-factories, ship-yards, and 10 school houses.

Among its best buildings, Valença can show the City Hall, the Amparo Church, of modern style, and the Hospital. It is connected with the Capital by a regular line of steamers and sailing vessels.

Further down on the sea-coast there are a lot of cities with bright future. In our opinion, this southern region has in its bosom the greatness of the Bahia State because of its natural treasuries.

There are *Prado* with its monazitic sands, which, in one year alone paid 900:000\$000 (about \$2.700.000) of export duties to the State of Bahia; *Caravellas*, 291 miles from the Capital, the topography of which looks like a chess-board on account of the way the streets are disposed forming right angles. It has whale-oil and a railway that goes to Minas. *Cannavieiras*, a strong centre of the cocoa trade, built on big lumber stakes on account of the river floods, with fine houses, newspapers, hotels, clubs, a large number of business houses, etc. etc.

All the streets of Cannavieiras city are sandy. The buildings worth noting are: the City Hall and the Jail. It has a water supply by means of pumps moved by wind.

The water is taken from the artesian wells and deposited in tanks with a total capacity of 70,500 litres. These pumps work constantly as the wind always blows in this region.

Since the moment we enter the Pardo river we see on the left, immediately after the promontory south of the bar, the Peso river, which connects Cannavieiras with Belmonte, passing through the interior of the bar of the Peso. After this we see yet two other rivers on the same side, the Jacaré and the Boi rivers.

ILHÉOS. — Above Cannavieiras, going to Bahia we see a pretty and wide bay called *Ilheos* much smaller, however than the « Todos os Santos » one.

It is in the southern part of the bay of Ilhéos that runs the Cachoeira river on the left bank of which is the city of S. Jorge dos Ilhéos, constructed partly on a peninsula, extented southwardly and ending at the Matriz hill with about 60 metres of height.

Ilhéos is in the bosom of a beautiful inner bay, behind some rocks, like the Rapa and others, which make it as picturesque as it is sheltered and adequated to navigation. This city was founded by Francisco Romero, in 1536, which means to say that it is of the oldest in Brazil. In the last years of the monarchy it had attained the maximum

of its decadence, even the Matriz Church — S. Jorge — was in ruin. But the extensive cocoa plantations began to produce some twelve years ago. The old Ilheos lately began to feel younger, there came money, people, and everything was transformed. To-day it can compete with the best cities of the interior of Bahia. It has good hotels, stylish mansions, paved streets, an active commerce with large stores and luxurious show windows, modern newspapers, as the Gazeta de Ilhéos, several factories of chocolate, cocoa, soap and others. Some of the near-by villages, as Tabocas, which 10 years ago



Ilhéos. - Panorama of a part of the city

were stopping-places for travelers, to-day present the aspect of cities by themselves.

* *

It is below Cannavieiras, between a part of Bahia and the Spirito Santo, that is to be found, a little way from the coast, the curious archipelago of polyperas rocks, dark and rough, by the typical name of Abrolhos. Some of these rock islands are visible from a great distance, the most voluminous being Santa Barbara, halfcovered by rickety vegetation. On it they built a beautiful light-house. Few people live in this piece of ground lost in the immensity of the ocean, and which the least noise of the life of the cities, does not reach

neither from any other human community. The present keeper of the light-house lonesomely lives so, with a small group of people, for the last twenty years. Only once in three months a coastwise steamer goes to the island, earrying provisions and fuel for the light-house, which never stopped one single night from illuminating its silent and desert horizon.

A number of sheep, goats and other animals, complete the group of the live population imprisoned in the Abrolhos, where days and nights slide without any alteration, well in harmony with the regular but unconscient rotations of the light-house apparatus which for the last 30 years lights the rocks without interruption.

We referred to the Abrolhos on account of the light-house celebrated to the navigation that there passes by.

It is impossible for us to give an account of every city. The limited space of this book would not permit it.

Those we have mentioned suffice to give an idea of the wealth of this large State. It continues to be at the head of the other States in many respects, and taking into consideration the variety of its production — being as Rio Grande do Sul and Minas, of the few States that do not deliver themselves to the contingent prosperity of monoculture — we have not to fear any crisis like those that have suffered Rio de Janeiro, Pernambuco and other States, not long ago.

The secret, however, of its great prosperity entirely lies on a measure that its administrators have not, as yet, been willing to, or did not know how to realize, and that is: the introduction of large numbers of European immigrants into the lands of this rich State.

When Bahia decides itself to adopt this measure and receives and disseminates in its beautiful territory some 500.000 immigrants, Bahia will then have established the basis of its true progress so vast and powerful, that we believe there is no other region in the whole of Brazil in a condition to equal it.

THE STATES OF ESPIRITO SANTO AND RIO DE JANEIRO

Between the two large eities of the Brazilian coast, one that was formerly the Capital of the country, — Bahia, — and another that is the Capital to-day, there is a sea-coast eity which is the Capital of one of the 20 States of the Union. It is much more modest than any of the other two, more modest even than many of the interior eities

of the country in the S. Paulo, Bahia, Rio Grande do Sul or many of the other States. Yet its name may sound as belonging to a great metropolis.

Victoria is the name of that small city, Capital of one of the smallest States of the Union. — the State of Espirito Santo,

Sailing from Rio de Janeiro in some of those eoastwise steamers that are in the habit of navigating nearer shore, in 20 or 24 hours we are in front of that city, which is not visible from the sea. We ean only see it after penetrating into the port, behind a crown of mountains at the bottom of which is the city.



Victoria. - The Moreno and the chapel of Penha

Entering the port, a little towards the east side of Villa Velha we see a large rock of conic shape, (which one would think is threatening to fill up the canal should it fall into it) and near this rock another one just like it but a little taller — they are the two inside marks of the estuary. This one is called Moreno and the former, the prettiest, they gave the name of Penha, and they built on top of it a small white chapel in the most ideal and poetical of spots.

We read that the little convent of Penha was started in 1558 and finished in 1575, and it is not much to have spent ten years, carrying stone by stone, to a height of 120 metres, to build that church and its convent, strongly enough to be able to resist, as they have resisted, during centuries, to the rigor of the weather with its strong winds on the sea-shore.

When the tourist wishes to go up the hill, he finds a regular road, paved with stones, in constant curves until the top where the church is all dressed in white with its stone foundation firmly fixed. The bay of Espirito Santo is wide, perfectly serene and calm, we could not say it more appropriately in any other case, — as in a looking-glass.

The present Secretary of Public Works, Dr Lauro Muller, promoted the construction of harbor works which will completely transform this port at an expense of £1.000.000.

In a curve of this bay and on the side of a hill is the city of Victoria with its uneven buildings, its churches, its public garden, which can be seen from the anchorage place. Its quay is not a pretty



Victoria. - A part of the city and anchorage

one, but a large number of boats are always to be seen there for the service of the port.

Notwithstanding it is an old city, it has had lots of time to grow and acquire modern ideas. Numerous cities of the interior of S. Paulo, others of Minas and others of Bahia, not to speak about capitals like Manaós, Curytiba, Bello-Horizonte, Maceió, are far more advanced, better europeanized, more progressive than Victoria. Why so? It seems that it is the fate of the cities located in islands in the Brazilian coast, not to conquer their way in the road of progress as those on the continent.

Yet the eity is not so very ugly. Seen from the anchorage place,

the distance shows it as a poetic relief, presenting itself as a pieture for a drawing room, mild and tender, round, soft, half framed in the long green of the mountains that have not the roughness of other mountains, everything displayed in another inverted landscape in that blue reflector of the waters.

The natural port is calm, sheltered and vast as few are. The gay panorama of the mountains surrounding it, correspond perfectly well to the beauty and quietness of the bay.

Victoria is a small city active and industrious, having seven



Victoria. - Another part of the city and anchorage

public squares, of which only one has a garden; twenty odd streets extending themselves in a longitudinal direction of the anchorage line, crossed by other narrow and inclined side-streets, lined by houses which in the great majority are there since colonial times. There are, however, some of modern aspect.

The palaee of the Governor is the old convent, which, as in the one of Paralyba, exhibits yet the church at the side.

The houses are disposed in irregular squares or blocks, lining streets disorderly arranged. They shelter under their roofs a population of some 9.000 inhabitants, being 4.423 males and 4.577 females, according to the eensus of 1902, only in the city proper. E. Reclus in his book — O Brazil — says:

"Several years ago, Victoria while having yet but little commerce, only small ships came to its bay. The improvement works made in the channel of the port which is over five or six metre deep permit the entrance even to the large transatlantic steamers. Its commerce grows to-day rapidly and the immigrants land there by thousands. Henceforth Espirito Santa considers itself independent from Rio de Janeiro as to its ultramarine relations ».

In fact it is so. The agriculture of the State was backwards and weak, its commerce, consequently, could not be very prosperous. However, the immigrants came there from Portugal, Germany, Italy and Spain. They went to the interior, to the river banks. Coffee began to appear in the market, in quantities growing larger every year, and everything was done.

Victoria is already appearing in the list of the noted exporting ports, in a progressive march which can be observed in the following figures:

COFFEE EXPORTS BY THE PORT OF VICTORIA

Years.						Kilogs.
1892						16.673.362
1893						21.763.169
1894						23.217.161
1895						24.641.717
1896						25.201.568
1897						34.791.488
1898						33.449.901
1899						27.379.764
1900						23.649.222
1901						41.494.095

And this progression can be maintained. Everything shows that, and it is hoped that the progression from now on will be much larger. The habit of working is extending itself to wider circles in the interior, the railways will awake facilities of transportation and exchange, and above all, stronger than everything, it will assure progress to the fertility of the soil, acting by the entrance in the field of work the enormous areas conquered on the wild forests

Espirito Santo has two railways: the Santo Eduardo to Cachoeiro with an extension of 90 kilometres and the Sul do Espirito Santo with 80 kilometres in operation and 83 in construction.

The road that goes to Caehoeiro, belongs to the Leopoldina Railway, crosses tracts of land most wealthy as well as thick woods and forests.

Another railway quite extensive and which will mean the realisation of an old aspiration of the people of the Espirito Santo

State, is about to be built soon, according to information furnished us by the Government itself in an official document. We refer to the following topic of the message of Governor Muniz Freire read before the Legislative Assembly:

« I must also inform you of the pleasing impression 1 have received by the recent organisation of the « Companhia Victoria á Diamantina », which proposes to realize the concession renovated by art. 18, n° 16 of the Federal law n° 834 of December 30th. 1901, for the construction of a railway that, starting from Victoria and going through Pessanha, in Minas Geraes State, will go to Diamantina an important centre of the same State, with an extension of 700 kilometres. » The works of this company have already started.

Public Instruction, Police, Production, commerce, etc. — The things that have reference to the public instruction of the inhabitants of Espirito Santo have not been neglected, though they could not have been treated as it would be expected to be treated in a State with such a brilliant future. A Central Department with its seat in Victoria, manages everything concerning public instruction under the direction of a General Director. The instruction given by the official institutes is divided into primary, — which is compulsory and free of charge, as it happens in all the other States of Brazil, — and secondary, distributed by the Normal College with 100 pupils, and several schools like the Atheneu Santos Pinto, the Collegio do Carmo, directed by Sisters of charity and installed in an old convent.

For the elementary instruction there are in the State 190 schools in the Capital and interior towns and villages.

The police force of Espirito Santo is a modest battalion of infantry, we might say a company, with 120 men, commanded by a major, 3 captains, 3 lst. lieutenants, 6 2nd lieutenants and a small band of music with 18 figures.

As to the sanitary public services, public aid, statistics, etc., there are only rudimentary departments very simple for the organisation of a State.

There is hardly any manufacturing industry worth writing about; there is one or other factory of soap, vinegar, beer and a few others. The great industry is the agriculture and of this there is only one important manifestation — the coffee cultivation. This does not mean that Espirito Santo does not export other products, because it does sugar, lumber and others, but excepting coffee all the others are sent in very small quantities. There is consequently the monoculture with all of its inconveniences.

It appears however, that a new element, will come to modify,

though slightly, the situation that eircumstance brings about, and it is the discovery of monazitic sand in the sea-coast. The executive Chief of the State wrote thus about it:

« As you know, it was only two years ago, in 1898, that the existence of that source of wealth in the State was knomw. Until then its existence was only known on the coast of the Prado municipium, in the State of Bahia. From that time however it was discovered that we have important layers of those sands in Barra de S. Matheus, Guarapary and Benevente ».



Cachoeiro de Itapemerim. - Peak of Itabira

PRINCIPAL CITIES. — Espirito Santo is not large, neither in territory, nor population. The former is of 45.000 square kilometres, the latter is 209.000 inhabitants, less than there is to be found in any other large city of Rio, S. Paulo, Bahia. Under the circumstances how could there be any city of importance?

At all events we will see what can be presented as cities of relative importance.

Cachoeiro de Itapemerim — or only Itapemerim — is in first place, thanks to the new vigor given to it by the immigration that largely increased the number of its coffee plantations.

It is the seat of a large agricultural municipium composed of: Conceição, S. Gabriel do Moqui, S. João do Moqui, Castello, and S. Pedro do Cachoeiro districts. Their population was by the census taken ten years ago 5.000 inhabitants, and by last year census 19.592 inhabitants. It is a picturesque city cut into two halves by the Itapemerim river on the banks of which it is built.

A metallic bridge resting on stone pillars unites those two parts.

In the southern part of the city are the railway stations. The river makes a curve right where the city is, and the houses there, nearly all one floor buildings of the simplest architecture, are spying at the sides supported on posts and pillars. On both sides are ample woods on the inclined plan, of a deep green whose greatness is being explored with the fall of the rich lumber pulled down by the active immigrants.

This city has progressed somewhat of late, inaugurated its electrical illumination and has built some nice houses and chalets.



Cachoeira de Itapemerim. - Southern part of the city

Not long ago it was connected with the Rio de Janeiro State and when they build the 83 kilometres rails of the Sul do Espirito Santo railway which goes down to Victoria it will be connected by railway with the Capital of the Republic.

Among other newspapers they publish « O Cachoeirano » which is the oldest paper of the state.

S. Matheus. — It has relatively little commercial importance. It is partly built on a little river with its stone quay and partly in a small mountain. The river that serves of decoration to it and which the city is named after is a beautiful stream of clear and calm waters. Its passage is always reproducing in front of the quay the image of the city with its high palm-trees planted some 30 years ago

in the down-town part of the city. This part of the city is composed of two floor buildings, plain walls and Portuguese style. In the uptown part of the city are also several two floor buildings. The city is illuminated with kerosene oil and is the seat of the municipium of the same name created by law n° 6 on the 28th of March 1835. It is situated on the right bank at the mouth of the S. Matheus river, four leagues from the sea and from Villa da Barra, and 28° n. of Rio Doce, altitude 18°. 53'. 34". longitude 3°. 9'. 13". It is 40 leagues away from the Capital of the State. It comprises the district and parish of the same name with a population of 7.761 inhabitants.



Victoria. - Local Scene, the Siesta

Cachoeira de Santa Leopoldina. — (Port of). It is the seat of a coffee municipium, where they are actively operating a renovation of enstoms and habits as well as the whole agricultural life of the State. To that city many Italian, German, Polish and other nationalities immigrants have gone of late. It is a small city and quite a simple one like all the others in this State. Its commerce, however, considered its territory is quite active and prosperous. It is a city of some 5 or 6.000 inhabitants. Adding to it the neighboring districts of Jequitibá, Mangarahy and Santa Thereza, its population is 9.867 according to the report of the statistics Department.

Benevente. — This is a municipium of some future. At present has but little importance. It produces rice, sugar, coffee. This municipium was created by decree signed on the 1st of January 1759. It is 14 leagues away from the Capital of the State. It comprises the districts Alto Benevente and Piuma parishes Nossa Senhora da Conceição de Piuma. Its population was 14.638 inhabitants in 1892.

Other cities like *Itabapoana* at the southern part of the State, *Espirito Santo* — as old as an age, — *Santa Cruz*, and several others, are spread here and there over the State. They have, however, but a relative interest for public knowledge. And why to cite them? Cities, like so many hundreds of them spread through the vast territory of Brazil, still growing, eities without anything particular about them, or as much as that terrace about which the Spanish poet wrote:

.....Tam particular, Que en lloviendo se moja Como los demas.....

(.....So peculiar, that when it rains gets wet, just like the others.....)

THE STATE OF RIO DE JANEIRO

On account of its size and physical aspect the State of Rio de Janeiro is the most hilly of all the other States of the Union. Crossed by capricious ridges of mountains, enormous lakes, it has a marvellous maritime boundary line where the most beautiful bays, refused by nature to the other States, were given to it with prodigality.

In this respect this State is in striking contrast with its neighboring State - Minas. - This latter State has not the least communication with the sea. Rio has so many and large anchorage places that it has no necessity to give commercial application to all of them. It concentrates all its maritime activity in the bay that lays between the two twin capitals: Rio de Janeiro, the Federal Capital, and Nietheroy, the Capital of the State of Rio de Janeiro. Every one of the great peculiarities that give fame and value to a territory, this State got them heaped up upon it by nature. It has the highest orographic point, the Itatiaya; the largest and most marvellous bay, Guanabara, (the Rio de Janeiro bay); the most eurious elbow of land, o Cabo Frio, (the Frio eape); the stupendous rocky mountains, o Pão do Assuear, Gavea, Frade de Maeahé; mountains of universal fame for its picturesqueness, the Mantiqueira, and os Orgãos. Everything in this State contributes to a glorious destiny. And as if all was not sufficient, there came men adding to such great natural possessions, their patient and valuable work. They built there one of the greatest commercial metropolis of the world, the political head of the whole nation, extended through the valleys a whole system of railways, installed on the top of the mountains, summer resorts being so many other cities, where the wealthy inhabitants reside.

Some by the sea-side, some in the interior places, some large, some small, there is quite a number of cities all through the State like Macahé, Araruama, Cabo Frio, Saquarema, Maricá, Nietheroy, Rio de Janeiro (Capital of the Republic), Mangaratiba, Angra, Paraty. These being the sea-side ones. The leading cities of the mountains are Petropolis, Nova Friburgo and Theresopolis.

The territory between Rio de Janeiro and the Ponta Negra, near Cabo Frio, where a large light-house is since 1861, is high ground, formed by enormous stones, sometimes bare like rocky mountains, sometimes covered with green, lined with thick woods. Among these superb stone bodies we see Ponta Negra (Black point), thus called because of the aspect and color of its elevation, on the top of which we see, from the distance at which the steamers pass by, a white building, used as a semaphorical signal station. Away down on a sandy hill near Saquarema city is the church of Nossa Senhora de Nazareth, all white, like a sea-mew.

The shores we see from there at the North, and which do not look at all like those of Rio Grande do Sul, are called Pernambuco. A little further ahead we see a fine stone body called Cabo Frio and there the coast seems to fold upon itself, abandoning its course from West to East, to follow North-East.

The Rio de Janeiro is, as to its territorial extension, one of the shortest States of Brazil, but its population places it among the most important ones. It has over one million inhabitants.

Owing to this relatively large population, Rio de Janeiro, compared with the other States, has developed very rapidly its agriculture, industry, transportation and commerce. Its extensive coffecand sugar-cane plantations concentrated during the second half of the last century the base of the national public wealth in that region as they did in Bahia in the last century, and as they are doing in S. Paulo. Thus has been dislocated the economical-financial hegemony, changing of seat, under circumstances, that as yet do not seem to characterise a superior law or a definite form.

We only apprehend the material phenomenon: the dislocation of the economical centre of gravity which we believe later on will have to be taken from S. Paulo to the rubber States in the North.

Once the sceptre of the country's agricultural wealth dislocated from Rio de Janeiro to S. Paulo, Rio began to exercise a very modest influence in the destinies of the nation, and the whole of the State, in spite of its beautiful and some most important cities, seems to be supported by the life of the small district that makes part of its territory, from the geographical point of view, but independent and distinct as it has been reserved for the functions of acting as the head of the whole country — the Federal District.

Why it allowed itself to be thus supplanted by S. Paulo in that privileged condition, is something that apparently ean't very well be explained. It was not inferior in the richness of the soil, neither in the density of the population, neither in the variety and excellency of the climate, neither even was it inferior in the geographical situation, number of ports, proximity of a large market centre, but much to the contrary, it had over S. Paulo all the natural advantages, and above all, it had great superiority in the advancement of political and social education of its land-owners, as well as in the development of two agricultural industries, coffee and sugarcane, which was cultivating when S. Paulo was but making experiments with them in the North and North-west regions, the marvellous West unknown at the time.

The Capital of the State had always been Nietheroy, the twin city of the Capital of the Republic. In 1894, however, the local Government transferred the Capital of the State to the city of Petropolis, where it was but a short while, returning to Nietheroy in July 1903. Nietheroy eelebrated then joyfully the recovering of its historical hegemony over the other cities of the State.

President, or rather Governor Bocayuva (in Brazil some States having the name of *Governor*, others *President* for the Excentive Chief of the State,) was the one who reinstalled there the Capital of Rio de Janeiro State, receiving the applauses of the entire population of the State.

Nietheroy is a small city built between the ridges of mountains that line the eastern side of the large bay. It participates of the soul and moral economy of the neighboring metropolis. Many of its inhabitants have their business and exercise their activity in Rio, on the other side of the bay. It feels with Rio the same feelings as if it were a part of it, and quite often an event in Rio has its repercution in Nietheroy quicker than in the very suburbs of the city. In fact, besides the telephone, telegraph and post office service, there is a constant communication service by steam boats (ferry boats) running day and night between the two large cities on the banks of the Guanabara bay. This constitutes a syncretism of life so intimate, so mixed with one another that hardly can be thought, setting aside, the material separation of the bay, the distinction that political geography causes between the two cities.

The true difference, the only difference, rests in their active life: Rio is a — whirlwind, — Nietheroy, — a resting place. The aspect of life in the streets of Rio is like that of the great commercial centres full of activity, people in the streets do not walk, they run, — do not speak, but cry.

Nictheroy is just the inverse of it: there is an infinite quietness in the air as in everything. Its population moves about at ease in the quiet streets. There is a sound calm within the open city, without walls, without barriers, surrounded only by its sandy shores, the



Nichtheroy. - The celebrated rock of Itapuca, and the beach of Icarahy

most picturesque sea-shores surrounding a city — Icarahy, S. Lourenço, etc.

Nietheroy has 35.000 inhabitants, tramways, electric illumination, newspapers, a large number of factories, ship-yards, etc.

ICARAHY. — Is most interesting: one of its monoliths, the indigene name of which was preserved, the — *Itapuca* — is a large, isolated stone, a monumental feature, half placed into the water, and the unmistakable beauty of which has already become celebrated in the art magazines, photographic views taken by the *tourists* and post-eards.

* * *

Public instruction, police, means of communication. — In the Capital as Petropolis, Campos and other cities of the State, are excellent institutes of learning, some private, some belonging to the government.

Among the latter we must mention the Fluminense Gymnasium, the Campos and the Nietheroy Normal Colleges, the Campos Lycenm. Among the former we must mention: The Free Normal College, of Petropolis, the Lycenm, of the same city, the grand Salezian College maintained by priests in Santa Rosa, Nietheroy, and which is one of the most noted institutes of professional education in the country, and the Anchieta College, of Friburgo, directed by Jesuits, also reputed as one of the best institutes of learning in South America.

As to the elementary instruction it is compulsory and free of any charge all over the State.

The State supports schools in Petropolis, Rezende, Nietheroy, Campos, Valença and Barra Mansa, and about 600 grammar schools all over the State in buildings owned by the State.

The police force of Rio de Janeiro State is constituted by an infantry regiment composed of two divisions, one militarized, an organisation identical to the Federal infantry, devoted to maintainance of the authority and integrity of the State, the other a civil organisation, to furnish detachments to different points, to do the police service. Each division has 400 men. They have both Manser guns.

On account of its territorial extension, the State of Rio is the one having the easiest means of communication. Two large railways place its interior eities and villages in contact with the exterior. These railways are the Leopoldina and the Central do Brazil. Besides these, other smaller railways connect two, three, or more cities within the State, as the Estrada de Ferro Campista, the Estrada de Ferro de Theresopolis, the Estrada de Ferro Sapucahy, the União Valenciana, the Rio das Flores, the Bananal, the Vassourense and the Rio do Ouro railway enterprizes. The total extension of those railways is 2.325 kilometres.

Besides these, there are yet several street railway enterprizes in some of the principal cities, as Nietheroy, Campos, Vassouras, etc.

Other eities like S. João da Barra, Campos, Maeahé and others have fluvial navigation companies.

* *

Petropolis. — The State of Rio ean boast of possessing with that pretty city of Petropolis one of the most interesting cities of the

New World. In the beginning it was a colony composed of 2.000 Germans, who came there in 1845 to settle themselves in grounds belonging to the imperial erown. Later on developed into a city, having been during three or four years Capital of the State. It is not so high as S. Paulo, Bello Horizonte or Curityba, as it is built in an esplanade of the Orgãos mountain, 750 metres above the sea level.

The fact, however, of being so near the Capital of the Republic, invested it with the prerogatives of a sanatorium and summer resort of Rio, and every summer the wealthy population of Rio, the diplomats and even the Executive Chief of the nation go to that eity.



Petropolis. - The Municipal Prefect's Palace

But it is not only on that account that Petropolis deserves the importance it enjoys among the cities of the Rio State. It is also a pet in picturesqueness and construction. A very mild small river runs in curves like a serpent through the interior of the city and over it, are to be found many wooden and iron bridges, which contribute in a large measure to embellish the gracious physiognomy of the city. On the other hand, the wide and straight streets, with their rows of magnolias, ever blooming, light but magnificent buildings, palaces of varied architecture, form a beautiful panorama not to be found in any other city.

The climate is charming. In winter it reminds one of Europe, it is quite cold, and cold weather may be hated in England or America, but is adored in tropical countries.

The streets and public squares are illuminated by electric lights, incandescent lamps. There is an abundance of cabs and carriages to be hired in the streets, and a tramway company is about to be organized to run street ears by electricity.

Everything that a modern city may wish is there: telegraph, newspapers, hotels, theatre, libraries, telephones. And better, there is an elegant society of what there is best in diplomatic and political circles in the Capital.

Two railways connect this small paradize with the Capital of the Republic, and two other cities of the Rio State. In the suburbs of Petropolis are factories, threading, cotton and silk dairies, breweries, etc.

One season in the year, the rainy season, is monotonous and tiresome to be spent in Petropolis. The largest part of moneyed people who visit it, run away in a hurry at the first tidings of that season,



Nova Friburgo. — General view of the Anchieta Collegio

the winter. But, when the real summer begins, it is nice to see the life that day by day the streets of Petropolis acquire. Large number of Rio families depart from Rio, to install themselves in the palaces and many hotels and boarding houses in the city until then abandoned. Others, the merchants and capitalists, go up every evening to sleep there, only to return in the morning to Rio to engage themselves in their daily labors.

Petropolis has 40.000 inhabitants with its suburbs. It is in the northern side of the mountains which incline themselves mildly towards the Parahyba valley.

In its private buildings we immediately note the predominance of beauty and comfort of the aristocratic cities, though there are also many humble belonging to the first inhabitants of the colony.

Among the public buildings there are some beautiful ones. It suffices to cite the City Hall, the best in the whole State, both on account of its size and stylish architecture.

Nova Friburgo. — Or simply Friburgo is a city very much like Petropolis as to its relations with Rio. It is built in the northern inclination of the *Mar* mountain in that part in which the mountain is known as Boa Vista (Fine View), allusion to the horizon without rival that can be observed around it.

It is not so new as Petropolis as it dates from 1819.

Its Nova Friburgo name originates from the fact of having been founded by 1.700 Swisses belonging to a district of Switzerland named Friburg, who settled there that very year and stayed for many, many years, some abandoning the colony which little by little assimilated itself to the native element, and to-day is quite a



Campos. - Quinze de Novembr street and Parahyba river

Brazilian city though many descendants from the settlers are still there.

It has not that aristocratic aspect of Petropolis, neither has it developed as much, but it has a beautiful climate, perhaps superior to the one of that city, as well as a natural circumstance highly pleasant, to which the country life of the suburbs give an exquisite relief. A railway and an audacious one, from the point of view of construction, conquering the mountain in strongly accentuated inclinations, connects this city with Nietheroy.

Campos, is situated on the banks of the Parahyba river, which at this point has a width of over 300 metres, it is nine leagues from the coast, and is a part of the Campos dos Goytaeazes municipium which is at the extreme North of the State of Rio de Janeiro.

As its name is indicating, it is a municipium formed by a vast plain which extends itself to S. João da Barra on the eastern side

and to the Atlantic, on the other side. On the western side the grounds are more or less hilly, in some places even mountainous, like all over the Murihé valley.

Two leagues from the city and on the right bank of the Ururahy river, it can be seen rising, solitary in this vast plain, called by the natives Goytacomopi, that is, Campos das Delicias (Delices field) the large hill ITAÓCA.

The city of Campos has an extension of nearly three kilometres in front of the Parahyba river, and about two kilometres towards the interior. It has 3.680 houses, 38 streets, 8 public squares, and several lanes and cross streets. It is divided into two districts. It was founded in 1674 and elevated to the rank of city in 1835. Its



Campos. - S. Salvador Square

level is $6^{4}/_{2}$ to $14^{4}/_{2}$ metres above the sea and its population 35.000 inhabitants.

It was the first of all Brazilian cities that adopted the electric light system of illumination and one of the first to adopt gas. Even squares to-day it has these two systems of illumination.

The city presents a pretty aspect of neatness in the streets, some paved with stone blocks, other with irregular stones. Its public squares have fine trees and some have even gardens.

In S. Salvador square is the beautiful building of the City Hall, one of the best in the State, having at its right the Municipal Library with over 15.000 volumes, and the Nossa Senhora Mãe dos Homeus having at its left the large building of the City Hospital where about 2.000 patients are taken care of annually, some of them coming from the neighboring municipiums, from the States of Minas

and Espirito Santo; the Grand Hotel Gaspar, the Post-Office, and other buildings. On the other side of the square is the Matriz church, S. Salvador, the telegraph Station, the printing office of the *Diario Popular*, a newspaper, and the beautiful building of the Associação Commercial, several lawyers offices, etc.

In a spot far away from the city, in the centre of spacious grounds, there is the Isolation Hospital, where those with contagions diseases are kept.



Campos. - Lyceum of Humanities and Normal School

Besides a large number of grammar schools kept by the State and municipality, private schools and night schools maintained by several associations, as the Brazileira de Beneficencia, União Artistica Beneficente, several mason lodges, the Macodronio Club, Workingmen Centre and others, the city has three good institutes of learning rendering important services to public instruction and the population receiving it. They are:—the Lyceu de Humanidades, with its course corresponding to the National Gymnasium one; the Lyceum Bittencourt da Sylva, of Arts and Trades, installed in a beautiful building

of its own, expressly built for that purpose, the beautiful architecture, and solidity of which presented a fine palace, where day and night were classes, for both sexes, much frequented, and the Normal College insalled with the Lyceu de Humanidades in the palace situated in the Pinheiro square. Each one of these three institutes has a frequentation of over 100 students.

Campos is a commercial and industrial centre of great movement and importance. There are in it two banking houses: «o Banco Commercial Hypotheeario de Campos» and the «Caixa Depositaria de Campos,» a Commercial Association, three good hotels, many others



Campos. - Water reservoir

of smaller importance, many restaurants and drinking places, four music bands societies, a gas company, an electric light one, sewage works, water works, a good street railway service, animal traction, going to the suburbs, and telephonic service.

The city of Campos has 15 catholic churches, a presbyterian and a baptist one, and three masonic lodges.

Its public market is plentiful, abundant, with goods of all kinds. In the slaughter house, in the lower part and away from the city, on the banks of the Parahyba river, they kill the eattle needed for the consumption of the population, under the inspection of the City Hall physicians. There is yet a theatre with a capacity of 800 seats — the S. Salvador theatre.

Three newspapers are published in Campos, the Monitor Campista one of the oldest papers in Brazil, with 64 years of uninterrupted publicity, the Gazeta do Povo, with 20 years existence, and the Diario Popular, besides other periodicals like the Combate and



BARRA DO PIRAILY. — GREAT IRON BRIDGE ACROSS THE PARAILYBA RIVER

the *Ideal*, this latter being the organ of the students of Campos, and the *Aurova* a literary monthly magazine.

There are five railway stations with daily trains starting and arriving there. There is also a fluvial navigation company with boats and steamers running to S. Fidelis, and S. João da Barra on the Parahyba river. There is a solid iron bridge 343 metres long, connecting the city with the northern territory where a new city is being formed, or the present one extended to, in that half league that goes between.

The municipium of Campos has 38 sugar-factories, some of very first order.

MACANÉ. — In relation to the cities of the Brazilian sea-coast cities, this one is a modern one. It was a village on the 29th of Novembre 1813 and became a city by the provincial law n° 364 of April 15th, 1846.

The geographical situation of Macahé is magnificent, at the mouth of the river of the same name, in front of the Atlantic, having a federal Custom House there.

The city itself is not large, it has not over 800 houses, and by the last census has but 7.000 inhabitants. It has no monument of importance or building worth mentioning.

Its suburbs, however, are populated and its inhabitants are industrious. In all they constitute a population of 40,000 inhabitants. The agriculture industry exploited there is the sugar-cane. There are many sugar-factories among which is the Quissamā steam factory one of the most important in the whole continent.

Macahé has railways connecting it with the Capital and the city of Campos.

Paranyba do Sul. — Like the majority of the cities of the Rio State, Parahyba do Sul is a new city. It was made a village by law of January 15th, 1883 and elevated to city by provincial law n° 1653, of the 20th of December 1891. The population of the whole municipium, according to the census taken in 1890 was 27.351 inhabitants, but, the city itself, has not over 9.000 inhabitants in the three districts of Parahyba do Sul, Braz and Entre Rios.

Barra no Pirahy. — Is one of the cities with better future in the Rio de Janeiro State, not only because it is the seat of an active and industrious municipium, but because of its communication facilities with the Capital of the Republic as well as S. Paulo and Minas States.

Barra do Pirahy was elevated to the rank of city and seat of the

district by decree of the 10th of March 1890. The city is built in a narrow valley embracing the Pirahy and Parahyba that meet there. There are five bridges, three metal and two wooden ones. It is the most important place on the line of Central of Brazil railway as all the large Minas and S. Paulo ramifications are crossing there. Besides these railway lines there are the works and main station of the Estrada de Ferro Sapueahy.

The first house of this city was built in 1853 and the inauguration of the Central Railway station (then Pedro II railway) took place on August 7th. 1864. The City Hall is a large neat building.

In this city are the barracks of the 2nd division of the Civil Police of the State with 400 men under the command of a major.

The commerce of Barra do Pirahy is active and in a relative large scale and there are also several industrial establishments: Near the city is an important sugar-factory « Engenho Central Rio Bonito, » which at present is stopped. Within the city of Barra do Pirahy is a large machine shop for the manufacture of agricultural implements, a sugar-factory, two lime ones, four tobacco works, a large distillery, a large leather tanning establishment, and others. Mendes, which is the most prosperous district of Barra do Pirahy has some of the most important industrial establishments of the State: The large Teutonia, de Preisse, Haussler & Co. brewery; the Companhia Itacolomy and a paper-factory directed by Dr. Felicio dos Santos.

The Mendes district is becoming the refuge of the wealthy population of Rio. It is illuminated by electricity, has two newspapers, and is about to be separated politically from Barra do Pirahy, to form an independent city.

Among the works of art worthy of note in Barra do Pirahy, we will mention a metallic bridge 250 metres long, across the Parahyba river, built in 1903 by the Estrada de Ferro Sapueahy.

REZENDE. — Another interior city connected to the Capital of the Republic by the central of Brazil railway. It is dominated by the upper part of it called Mantiqueira. This is a coffee district, and prospers when that agricultural industry also prospers, and falls when the latter falls. It extends itself on the right bank of the Parahyba river, on top of three hills, each one with a church, — Matrix, Rozario and Passos. — The panorama displayed before the eyes of the observer is one of the most beautiful in the whole country. On the left bank of the river and in front of the city, are the Eliseos fields, where is the E. de F. Central of Brazil, connected with the city by a bridge. It comprises the parishes of Nossa

Senhora da Conceição, S. José do Campo Bello, Bom Jesus do Ribeirão de Sant' Anna, Santo Antonio da Vargem Grande and S. Vicente Ferrer.

Rezende has no less than 16,000 inhabitants. It has two newspapers and about 2,000 houses,

Rezende has developed of late cattle raising and the dairy industries. The farms of this municipium are already sending cheese and butter to the Rio de Janeiro market. The budget of this district is



Vassouras. — View of a part of the city and the Barão de Amparo park

145:118\$000 from all sources of revenue, and the expenses are equivalent to that.

Vassouras. — Occupies an intermediary location between the Parahyba valley and mountains. It was formerly much more prosperous than it is to-day. And considering its churches and buildings that line its streets, the new comer understands at once that Vassouras is a city that promised a good deal more than wher accomplished. It was creeted in 1833 and was progressing so much that two years later, in 1835, another decree made it head of the district. Yet only was made a city in 1857. It has a population of 12.000 inhabitants,

more or less. The census of 1900 gave it 9.666, being 4.956 males and 4.710 females.

Though it has lost much of its opulence of olden times, Vassouras is yet one of the prettiest cities of the Rio State. A short railway owned by the municipality connects it with the main line of the Central of Brazil railway which runs five kilometres away from this city. Two railways cross this municipium, benefiting a good deal Vassouras city. They are the « Central of Brazil Railway » and the « Melhoramentos do Brazil ».

The cultivation of this region is: coffee, sugar cane, tabacco and grain. There is also a large matches-factory Serra do Marowned by Dr. Aarão Reis. There are two newspapers in the city: O Municipio and the Vassouvense.

The city is surrounded by farms, mostly eoffee plantations. The budget shows a revenue of 111:555\$000 yearly.

* *

Barra Mansa, a pretty eity, Valença Cantagallo, Paraty, Saquarema, S. João Marcos, Capivary, Rio Clavo, etc. are so many other eities about which we would like to write. Each one of them has something worthy writing about. It is impossibe, however, to enter into so many details and we will stop here as far as cities of the Rio State are concerned.

As to the villages, many of them are as important as some of the cities, others are still progressing and developing, promising to become soon large centres of activity and commerce.

Rio de Janeiro is one of the most noted and most cultured of the States of Brazil, but, owing to the sudden depression in the prices of its main export products — coffee and sugar — it has crossed a crisis these last few years, exposed to horrible contingencies of financial anormal violences. The last three years however has considerably bettered its conditions.

THE FEDERAL CAPITAL

A tract of the State of Rio territory located between two gigantic bays, — Angra dos Reis and Guanabara, — ever since the eighteenth century, has been the seat of the nation's government, with the name of — Municipio Neutro (Neuter Municipium), — and, after the

Republic — Districto Federal (Federal District). For the geography, however, it was, it is, and always will be known, as — Rio de Janeiro.

Those who, coming down from the North, direct themselves to Guanabara bay, as soon as they leave behind *Ponta Negra* and *Cabo Frio*, which are 60 miles away from Rio de Janeiro, will see at a short distance from the coast, always lofty and picturesque, a series of islands, seattered here and there, some round, some quite bare, and others covered with green woods looking like floating forests.



Rio. - Dos Mineiros and Alfandega quays

Two of them especially, attract very much the travellers' attention: one, is *Ilha Raza* (Flat Island), a large, flat rock, as its name indicates, divided into two lobules with an electric light-house built upon it, displaying a red and white light. The other, is *Escalvada* (arid-sterile), located at the west side of Raza Island, a very small spherelike island, some six or seven metre high, with no vegetation, what justifies its name.

The Raza Island is very much liked by the passengers going to Rio, as it is the first landmark showing its entrance, and its lighthouse, the first sign of the civilisation that flourishes near by in the grand organism of the city.

When the passenger comes nearer the entrance of the bay, from board the steamer he sees, on the right, a series of dark mountains, coming towards the sea: it is the Itaypu point lined by a pretty group of little islands, known as *Ilha do Pác* and *Ilha da Mãe* (Father Island and Mother Island).



RIO. — ANCHORAGE AND PART OF THE CITY

On the left, beyond, where the horizon is, wrapped in deep blue, rises the phantastic figure of Gavea, with its bald head, constituted by a mass of polished rock. This strange profile of mountain will never more be effaced from the memory of the traveller, once he has set his eyes upon it.

Further beyond, is the blunt peak of the Andarahy, of a sombre blue. Then towards the interior, the Corcovado needle, that stony line, here of naked rock, there covered with vegetation, accompa-



nies the eoast as a lively gnard in the contortions of a cataclysm that might have shaken everything, bringing up the mountain roots, giving life to the rocks and the woods. Indeed, the whole seems a lively one. One would say that everything is dancing before that infinite light poured everywhere. The steamer is getting nearer and the landscapes transform themselves. Nobody can contemplate this seenery without being wrapped by the unlimited grandeur of the whole panorama. None of the great writers or artists, national or foreigner, who have appreciated this unequalled spectacle of the Rio entrance has been able to describe it either with his pen or his brush.

At the bottom of those colossal mountains, along shore, there we see spread out light plains, more or less levelled, which end in beautiful sea-shores, sometimes covered with rocks sometimes with snow-white sand. On the left is one of those beaches, Copacabana,

which is already the beginning of the city, because Rio is a city that spreads itself out with districts all over, some towards the sea, others towards the curves, contemplating Nietheroy on the other side of the bay, towards Cajù, others towards the hills and still others accompanying the valley that lines the Central of Brazil Railway road, as if the whole Capital were pursuing them. Upon a small light green rock, is the little white chapel Nossa Schhora da Copacabana. On the beach a row of summer residences with roofs covered with new tiles is seen in a beautiful display. And hardly we leave behind this flying landscape, and the Cotunduba island, then we see on the left the great monolith, the Pão do Assucar



Rio. — General Osorio's statue

(sugarloaf), enormous, conic shaped, isolated rock, which celebrates the interior sea-entrance of the bay, with its projection covering the channel's mouth.

Looking at it one seems to hear the poet's voice when he referred to it in these verses:

Audaz colosso,

Robusto velador, que ao longe assombra Os genios do oceano, e prada ao mundo: — Em nome do direito e da justiça, Podeis entrar no lemplo do futuro, Suerificar ao Deus da liberdade!

(Daring colossus, strong watcher, that from afar frightens the Ocean's geniuses, and cries out to the whole world: — In name of Law and Justice, you can enter the temple of the future, to sacrifice the God of Liberty!)

On the other side, the continental land, extending itself just like a peninsula, advances as if to meet the Pão do Assucar rock and S. João hill, forming a kind of step to them. There, the sea is nothing but a narrow corridor, walled on both sides by rough rocks. This strategic passage was modified by the building of fortresses on both sides. In spite of all, the corridor is dominated, from the inside, by a colossal rock, the Lage fortress, roofed with steel, and walled with steel like an armoured ship, with open spaces here and there, through which the gun mouths watch as if they were so many attentive eyes.



Rio. - The Cathedral and do Carmo Church

Passing those narrows, on the right with the Imbuhy and Santa Cruz fortresses, and on the left the S. João and Mallet ones, and, following the channel, between Santa Cruz and Lage, there we have the Guanabara bay. On one side, at the West the grand Capital, not the whole in a lump, but in pieces, appearing behind the curves of the sea-shore and green hills. Only one part of it, — the one lining the poetical curves of Botafogo, Russel and Flamengo — appears in sight.

In front, on the east side, we see Jurujuba where is the Hospital for epidemic diseases. After that is the charming beach of Icarahy with its eelebrated rocks, and further ahead is Nictheroy, the pretty Capital of the State of Rio de Janeiro, looking towards the old part of the metropolis.

Between the two cities, but nearer Rio is a little island Willegaignon, which is to-day the sailors barracks, and in 1555 was the initiation of the city when the daring filibuster, which gave it the name planted there the seed of the first seat of the city.

The aspect of that anchorage place is charming for the new beauty of its perspectives, for the harmonious tone of the colouring, for the variety of the contrasts in the horizon outline.

E. Reclus speaking of that beautiful spot which he visited, said:



Rio. - S. Pedro de Alcantara Theatre

« When the weather is fine, when the abundant sunlight contrasted by the shadows, illuminates under different forms and with changing hoes the rocks, the grass and the woods, when successive plans becoming bluish by the distance, project themselves upon the blue horizon of the interior hills, as the Estrella hill and the row of obelises of the Orgãos ridge of mountains, the massive Rio offers a charming panorama by the beauty of the colouring and the indefinite diversity of aspects. When, notwithstanding is a heavy gray leadlike sky isolating the group of hills in front, and the clouds or the showers hiding the pointed pyramids, the walls in the horizon farther away, the landscape assumes the appearance of the polar regions: it looks to the observer as if he were approaching a Desolation

island, as in the Groenlander archipelagoes or in Fire Land and asks himself, how is it that men could found in such a place a large city like that, one of the most charming of the Universe. »



Rio. - Front of the Benjamin Constant institute

Quite often on winter-mornings the fog that slowly goes up forms thick sheets white at the basis and only sombre at the top, away up, detached from the even bottom of the sky, giving the idea of an inexplicable, subversion of all physical laws. On other occasions, the upper points disappear under a mass of heavy fogs, and



Rio. — Terrace of Passeio Publico

the inhabitants of the city, that look to the Tijuca hill as if it were a barometre, say: Tijuca has its cap on, it is going to rain... And in fact when that happens, it rains.

But normally the light prevails, in all its force, showing the pretty colouring of the various plans of the bay side, the transparence and brightness of everything, the bluish ether making milder and more poetical those rocks, and the woods which drown their depressions and dress their bodies.

The passenger steamers anchor a little nearer the city quay, between a place called Poço (well), where the Brazilian men-of-war are, and a small island in front of the Custom-House and on which they erected a Leautiful building of gothic style which is used as the barracks or quarters of the Custom-House inspectors and is thus called Fiscal Island. It is a most pretty building.



Rio. - Initial station of the Central of Brazil Railway

The space between that island and Ponta do Cajù is completely taken up by ships of all nationalities, of all kinds, from the smallest vessels to the largest steamers, some coming and just anchoring, others preparing to sail and among them a numberless lot of lighters, tow-boats and launches, some propelled by steam, others, by gazoline and others even by kerosene, sailing here and there, some noiseless, some whistling and all with their flags aft.

By the quay, alongside the wooden bridges a number of small steamers and sailing ships receive from the storage houses large quantities of coffee to be transported to Europe and the United States, and the thousand varieties of industries, the surplus of the metropolis commerce going to the coast ports.

The forest of masts, chimneys, the stretched ropes, the noise of

voices of the hoisting machinery, of steamship whistles, give to that part of the bay a characteristic feature. Indeed it is quite a contrast with the vastness and profound silence of the waters elsewhere.

But it is not only the Rio de Janeiro, or Guanabara bay, that we see here, nor even only that eirele blue and wide which the steamboats take one hour to cross in its shortest diametre.

Farther away from this part of the Capital and Ilha das Cobras (snake island), is an interior sea wide open, deep and pacific, with



Rio. — Federal Capital : Sea-shore of Leme

numerous small but charming islands, some populated, others occupied as commercial, storage places, others are industrial establishments, some small, some as large as half of some kingdoms.

The territory forming the curved contour lines of this colossal gulph, the most beautiful of all in this planet, is the most important of all Brazil as to the density of population and number and variety of establishments.

We will review, however, only that part near the gulph on the west side.

There we see the principal military and civilian establishments of Brazil, the largest factories, ship-yards, dry-docks, storage-houses, the most earnest commercial and industrial activity of the country.

The Capital has long ago overrun the limits with which it was found by the time of Brazil's independence. The old part of it forms one single district, and compared with the present area of the city is just like the seed is towards the fruit.



Rio. - Statue of D. Pedro I.

Considered by its frontier the city of Rio would be one of the largest cities in the world. But we must allow for the enormous spaces that Santa Thereza, Coreovado and other hills occupy within its area.

The buildings and the districts have been spread out in an hazardous way, through these accidencies of the soil. Some of the hills have been pulled down as the Senado one, others will be in future, but some never will be, and thus the city will keep on, filling with streets and new buildings, the large empty spaces uniting with hou-

ses the different districts now only connected by the street railway lines.

Whoever wishes to judge Rio by the architectural value of its buildings will not do it justice, Rio representing, as it does, such a large city. The greatest efforts of man in this metropolis have not been devoted to embellish the city, but in preparing its foundation, if we may say so. What has been done in openings, filling up, levellings, has been great work. Millions of cubic metres of earth have been taken away from the hills.

The extensive plain called Praia Formosa, Villa Guarany, etc.



☐ [] § Rio. — Quinze de Novembro square and Board of Trade building

is the work of an enterprise. There was the sea, small little islands, the names of which can still be seen on the maps: ilha dos Melões (Melons island), ilha das Moças (Young girls island), etc. Among others there were the marshy grounds of the Campo da Acclamação. Formerly washerwomen were seen there, just in the same place where to-day is the beautiful park with its artistic grotto, little lakes, etc.

The city in 1822 had only 11.000 houses; in 1850 had 16.000; in 1864 had 21.000; in 1880 had 50.000 and to-day has about 81.000.

There is nothing special to say about the buildings of Rio de Janeiro. The houses of the new districts are comfortable, some of them of elegant architecture and surrounded by gardens, but those of the commercial districts, have only very slowly been undergoing some modification, and if in one street or other appear some nice buildings, the majority of them is an awful sight, reminding antiquity, without any taste as to its ornamentation or architecture.

The main landing place is the Pharoux quay, which the municipality has now transformed into a beautiful and large square, with a pretty garden, and a large bronze fountain.

This square has as a prolongation of it another smaller square, where is at one side the Old Court of the Emperor, to-day transformed into the telegraph department. In the centre of the garden



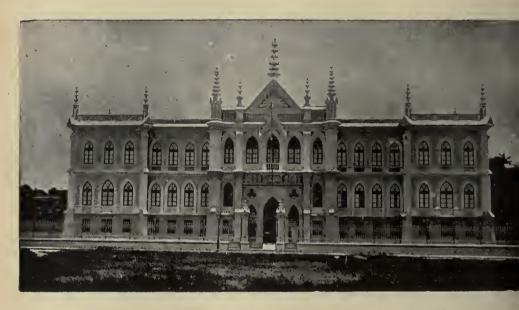
Rio. - Senador Dantas Street

of this smaller square is General Osorio's statue, beautiful work in brouze made by Bernardelli with pretty low relief at the basis.

This square leads to Primeiro de Março Street, one of the main thoroughfares of Rio. There are some fine buildings in this street: the Exchange Building, the Post Office, the Banco do Commercio, the Supreme Court, and several other business and private houses. The transit both of carriages and trucks as well as of foot-paths in this street is very lively.

It is from this wide but uneven street that start other narrow eross-streets lined with tall buildings, paved with stone blocks, filled with dust because of the lively transit. They all run towards the centre of the main part of the city, where is one of the finest parks of South America.

Of all these cross-streets one, that is a regular thoroughfare, is the Onvidor Street. This street is a deception to the visitors coming from the different provinces of Brazil and who heard so much about it.



Rio. — Front of the Gonçalves de Araujo Asylum, in Campo de S. Christovão

If you have never been in Rio, just imagine a street 6 ⁴/₂ metres wide, beginning at the Quay and ending at S. Francisco Square, where José Bonifacio's statue is. The street looks just like a corridor, lined with large and uneven buildings, some splendid ones, others of the worst kind, keeping in mind colonial architecture. The latter are fortunately in small number. The pavement is good, in the centre paving stones, in the side-walks coloured mosaic. Owing to the excessive transit and the narrowness of the streets-carriages and horseback riders are not allowed to go through. Every house in this street has in its ground floor a store of some kind and in the show windows are the most varied displays of specimens of national and foreign industry. The best tailors, dress-makers, jewelers, bric-à-brac dealers, the most luxurious stores of the town are there. This

sireet is the rendez-novs place for the high-life, the unemployed, the idlers, the politicians, the adventurers, the lawyers, the college boys, all that floating class that is the live foam of the large eities.

This is one of the Rio curiosities, the most exquisite, the most



Rio. — The Post Office and Exchange Building

individualised euriosity of Rio de Janeiro. To go there and not know Rua do Ouvidor, is impossible.

Another thing that gives Ouvidor an exquisite feature is the Café. These houses devoted to the sale of demi-tasses of black coffee spread all over Brazil, in every city, occupy many ground floors in this street and here, more than anywhere else, they are a place of meeting and conversation.

To complete the noise of the street there are the Music stores, where they try a piano every minute, there are the phonograph stores, the bar-rooms with orchestra, and thus this all contributes to that noise of the streets that voices and laughs heard from all sides, from the crowds standing and chatting at the corners, and from the lively transients who walk up and down the street.

The Ouvidor Street is also the forced witness of the stump-spea-



Rio. - Town Hall

kers, at the meetings, military parades, carnival feasts, religious demonstrations, etc.

The first time we crossed that street, some twelve years ago, we had just arrived from the province, and it caused a deep impression in our mind of shame and discouragement. And we understood that there was a good deal to be done, for the country to get rid of those colonial buildings, and that backwards artistic state in which the eighteenth century left it. We understood the general abandonment of the old dynasty at the hour of its fall, by the

energetic necessity acting upon the race, necessity of going ahead, of progressing, doing away with a system that was bringing Brazilians up accustomed to the contemplation of those antiquities, to teach democracy which is knocking the crowds one against the other.



Ex-President Rodrigues Alves (1902-1906) who initiated the Rio de Janeiro improvements

The Ouvidor Street we heard of in our native town, was indeed that narrow street lined with colonial times buildings, heavy, filled with dust, insignificant both as to style and comfort. It was a deception, an enormous deception!

A few years afterwards, in spite of the bad administration the

street was greatly modified with some stone and marble buildings substituting the old colonial ones.

The old district of the city, to-day entirely occupied by business houses, which give it the appearance of a colossal bazaar, with all



Dr Pereira Passos, Prefect of Rio de Janeiro

kinds of goods, embraces the centre shores from the Custom House to the extreme end of Gambôa.

Some ramifications of the city have extended considerably, embracing areas in far away places, around the interior hills and the shores that line a stretch of the beautiful bay. The districts settled



CAPITAL FEDERAL. — ISLE DAS COBRAS AND THE NAVAL SCHOOL

in those curves are incomparable as to their bright beauty, ample open air, and they have in that transmarine picture, always moving, always new, an enjoyment as nowhere else can be had. With electric tramway service the wealthy part of the population is transported to and from the new districts of the modern Capital. Generally the streets the ears go through are lined with fine houses with gardens. One of those shores, appreciated both by the natives and foreigners is the absolutely geometric curve dominated by two small hills at each one



Rio. - The National Printing Office

of the extremities of the line. It is Botafogo. It is under the projection of the Coreovado hill, that stupendous rock, dark grey, dressed in rich vegetation which wraps certain part of it, leaving bare the southern prism.

Many of the newly arrived would not believe that Brazilian engineering should have dared to build a pleasure railway going up to 700 metres high.

Seen from one of the sides of the curve formed by the bay, the

perspective of Botafogo is splendid, marvellous; the Pão do Assuear hill seems to take the entrance of the small little gulph, perfectly ealm, as a piece of crystal, as a polished emerald. At the basis of this is a rose colour building of large proportions, half hidden—it is the Military College built between two blocks of the group of rocks. On the opposite side is the original profile of Gavea.

The Botafogo bay is lined by a beautiful avenue which extends itself full length with three different roads nicely paved with pretty grass lawns and flower beds between and lining the street side and brightly illuminated with different rows of are-lights. It is no doubt a charming shore, the prettiest public garden that could be imagined.

But the population do not seem satisfied, they keep on multiplying the fine mansions, the summer residences, and they are transforming the lands alongside the Leme, Copacabana and Ipanema beaches into a large city, a beautiful summer resort. They have already good hotels, telephone, telegraph, gas, all conveniences to make it a comfortable place and the electric railway, trolley system, connects these three places, that look only one city, with the heart of Rio.

While this prolongation of the city or formation of a new city in itself is being operated, the same is happening on the other side of the city alongside the road of the Central of Brazil Railway, each one of those nucleus formed being well worth the name of city.

Large squares with gardens are reserving for the breathing of the great organism of the city, large open tracts of land, but not satisfied with their space, they have gone up the hills.

These squares are not in so large a number as one would think considering the broad space of the city. Some of them, however, with their sizes and beauty, compensate well the shortness of the number. We will cite Duque de Caxias square, in front of one of the finest churches of Rio. This one is not so extra large, but has a real beautiful garden, and in the centre of it, the Statue of Duque de Caxias on horseback, a bronze statue which speaks highly for the artistic work of the Brazilians.

The Tiradentes Square, formerly ealled Rocio, is a small but pretty garden with a bronze statue of the first Emperor of Brazil which is a great work of art.

The Passeio Publico is the most delicious place in Rio, for the beautifulness of the landscape having the pretty flowers on one side offering the sweet fragrance of their scent, and the sea on the other side leaving wide open room to blow over the fresh breeze. It has a fine terrace looking towards the bay. In the garden are good

specimens of a variety of trees, and some spots of it look like regular woods. There are lakes also crossed by bridges, nice lawns, everything to make it perfectly delightful.

But what must we say then of Jardim Botanico, (Botanical Garden)? There is not a foreigner, a *tourist*, even if only in Rio the few hours the steamer is in the bay sailing on the same day, that does not try to go to the Botanical Garden. It is supported by the government for the purpose of *Botanical Researches* and *Acclimata*-



The Polytechnical School

tion Experiments. The admission is free, and there is a line of the trolley cars that passes by the door of the Garden, so that there is nothing uncomfortable in making the trip. As soon as we enter, we see beautiful streets lined with tropical trees. The royal palm-trees (areca obracia) avenue which crosses the garden from the gate in diametrical line, is a picture that we cannot easily forget, and it is already well known all over by photography.

Another square where a garden was lately laid out is the Onze de

Junho Square, named after the famous naval battle fought on that day by the Imperial navy against Uruguay. It is situated at the end of the Mangue eanal, which runs through quite a long stretch of the new part of the eity, lined by two straight avenues, nicely paved with a row of superb palm-trees.

The most beautiful, however, is the Praça da Republica, (Republic Square), a wide square transformed into a park enclosed by elegant railing. The area of this park was nicely divided into small little woods, grass valleys, small little rivers with artificial tiny islands and dominated by artistic bridges. There is also a pretty grotto with a beautiful caseade, which constitutes an attraction not common in public squares and gardens. Several thousands of specimens of South American phytology are represented there in groups, and spread out, making up a prodigious landscaping architecture.

A little farther ahead from this park is the enormous main station of the Central of Brazil Railway wich connects the Capital of the Republic with three different States, crossing forty cities and having a yearly revenue, of 35.000:000\$000.

Several other railways — The Leopoldina, the Melhoramentos, the Rio d'Ouro, etc. — start from Rio to the interior; none, however, has the great role that the Central of Brazil performs in the intercourse life of the Capital. This railway transports fourteen thousand passengers a year, between the city and the suburbs. The extreme ends of this railway are Bello-Horizonte and S. Paulo. President Campos Salles ordered the construction of the road in the direction of Curvello and President Rodrigues Alves intended to go beyond, towards S. Francisco river valley.

* *

The districts where the maritime commerce concentrates, Saude, Saeco do Alferes, etc., are the ugliest of the Capital: tortuous streets, narrow, lined with old, ugly houses, filled with dust, grains of coffee, and the transit through them obstructed by heavy trucks, filled up with big piles of eoffee bags, and the crowds frequenting these streets are of the worst class, but during the day those who make all the noise are the drivers and workmen who run about, cursing and punishing the poor animals in a brutish way.

A strong odour of coffee, overpowers all others. The nice and neat electric tramears that make travelling so comfortable in other districts could not be used through these streets. To go through them in a carriage couldn't be done without running risk. There is, howe-

ver, a line of horsecars, narrow track (0^m60 wide) running through this district.

Those who never knew this aspect of Rio life, these dirty but active and hard working districts, that greatness of work and com-



Rio. - New Buildings: Court of Justice

merce in one of the largest masses of contemporaneous wealth, will not see it any more, as this primitive part of the city is disappearing, thanks to the harbour works that the present administration has started.

We love the active cities, the hard working districts as we abhor

the places of idle peace, and we have a right to feel so, as — chacun peut, à son gré, disposer de son âme. — But, we will never feel any longings for the dusty districts of Saude, Sacco do Alferes and others. Let them pull down all those old buildings.

In the same ease are the districts of Castello hill, *Pinto*, *Nheco* and other hills where the lowest classes gather. These hills ought to be thrown down, not only for the horrible houses, but to allow some fresh air in the city.



Capital Federal: The Municipal Theatre

The transfiguration of the Brazilian metropolis, initiated by President Rodrigues Alves, will be work for a long time, because Rio is enormous in size, and everything is to be done, in order that it may become the Capital of Brazil as it deserves to be, and as Brazilians would like to see it: that is, a city with gardens, wide open avenues, parks, bay-side drives, taking full advantage of the magnificent position it is in.

Rio de Janeiro, like all the other cosmopolitan cities has not an accentuated physiognomy, uniform and distinct. It is a monstruous

agglomeration of aspects, a gathering of cities, formed by its enormous districts, some plain, some mountainous, some hidden among the hills, others exposed by the sea-shore, or isolated in islands spread here and there in the bay. All these districts are populated by heterogeneous inhabitants, arriving from all the States in the Union



Rio. - Glass windows of the Municipal Theatre

and every country in the world, speaking all the languages imaginable.

In the morning when the electric ears, that work without inter-

In the morning when the electric ears, that work without interruption, day and night, arrive from the extreme ends of the city, — Gavea, Ipanema, Leme, Real Grandeza, Botafogo, etc. at one of the central points of the city, Carioca Square, and there empty that

crowd of early workers, we see a curious sight: men of all types, white, negroes, mulatoes, indians, Europeans, a most phantastic mixture, landing there, taking all directions, mainly the commercial streets, Uruguayana, Gonçalves Dias, Sete de Setembro. And this movement continues until ten or eleven. After that it slackens



Rio. - Glass windows of the Municipal Theatre

a little, beginning anew in the afternoon ever since three o'clock. Then the morning performance begins but in the other direction. From the streets coming from the city and landing at Carioca square, comes a constant crowd of men and women, native and foreigner, looking for the cars to take them home. The

news-boys add to the life of the seene crying out the afternoon papers: the *Tribuna* and the *Noticia*.

In another square not far away, San Francisco which is another terminus of tramway-cars running to other districts, the same scenes as the Carioca ones, are reproduced. To that point come and start tramways from and to 23 different lines, all belonging to the S. Christovão line, with 60 kilometres of extension. There they bring every morning thousands of passengers from all points: Tijuca, Fabrica, Uruguay, S. Christovão, S. Januario, Itapagipe, Alegria, Ponta do Cajú, Pedregulho, Catumby, etc.

The beautiful Tiradentes Square offers the same picture and in about the same proportions. Another large street railway concern, the Villa Isabel, empties its cars in that square and there receives in the afternoon all that large erowd of workers, business men rich and poor, working men of all classes who come from their day's labour. Over the Santa Thereza hills is another tramway line, also an electric and trolley line passing over the arches of an old aqueduct, thus the passengers while crossing it go over the city streets with the houses below in wide open view, and it is interesting to look at the people and carriages below looking like miniatures. But as to seenery what there is of unexcelled in Rio and purely local is the ascencion to the Corcovado mountain. We hardly feel going np, so softly the tramway runs. This line is a fine piece of engineering, as we said above.

Indeed Dr. Passos found a way to plan that road, the ears starting right from the basis of the hill, at the end of Larangeiras street, and going up to the needle point, where, from an iron pavillion we see the whole map of the city with its boundary lines: the capricious mountains, the lakes, the red spots of the groups of buildings, cut through by the streets, the towers and domes, as the sentrics of the different districts, the forest of active chimneys, giving the only sensation of life of the whole, and at last, framing the confused painting of the city, some far away bluish hues of the ridge of mountains, here, pointy-like towards the air, there, in sweet rounding form, but everything far away, undistinguishable and confounded into a sea of light, a blue lucid sea.

But this is not the only belvédère of the city. There, in the first plains of the Tijuea mountains, are parks, natural ones, woods never trod upon, fine roads open and nicely kept by the municipality, grottoes, easeades, and splendid summer hotels. An electric road starting from Uruguay street takes the passengers and tourists to the first plain of the hill. There, carriages can be hired to go further

up. The spectacle of that mysterious forest is charming and compensates the discomfort of the long trip.

* *

Considering its political importance Rio de Janeiro has few large buildings,

The Government Palace which is also the residence of the Presi-



Capital Federal - Construction of the Passos street

dent is located in Cattete street. Though inside magnificently decorated, its exterior is severe, and excessively heavy. It was formerly a private residence. Its park, however, is worthy of a king's palace.

The House of Congress can hardly be called a palace. It is enough to say that it was the old jail in the colonial times. The Senate building is a little better, but is in quite a distant district from the one where the Congress building is.

The Police Barracks is a good building but simple like all the colonial buildings with plain walls.

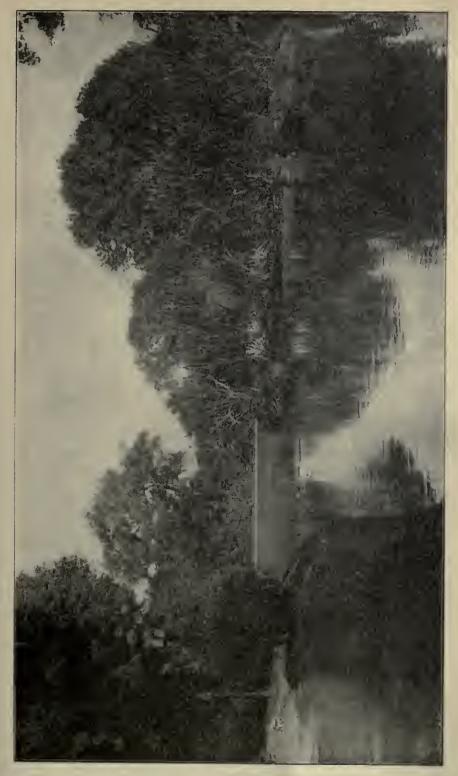
There are, however, some public buildings noted by their architectural beauty and richness of material used. I eite, for instance, the Supreme Court, in Primeiro de Março Street, which I referred to above. It is a beautiful rose color stone and marble building, of sumptuous architecture, not only in the whole, but sumptuous in



Rio. - Fountain in the « Gloria » Garden

the ornamentation details, both of bronze and marble, as well as in the internal decorations where there are good specimens of painting and seulpture work.

The Stock Exchange near this building is also a palace of importance. It was planned by a Brazilian architect, Dr. Bittencourt



CAPITAL FEDERAL. - PART OF THE ACCLAMACÃO PARK

da Silva, and is of Italian style. It is one of the finest buildings in town.

The Candelaria church, unfortunately located in the middle of narrow streets, is a place the visitor has to see. Externally it is like one of those old European churches with a majestic dome painted white to symbolize purity. It was planned and built by Evaristo da Veiga a Brazilian engineer. It dominates all the commercial part of the city. The three bronze doors with relief work are a true work of art. Inside it is the richest church of Latin-America, is all dressed with marble and in its beautiful ceiling and wall paintings and decorations, worked during twenty years the best reputed Brazilian artists.

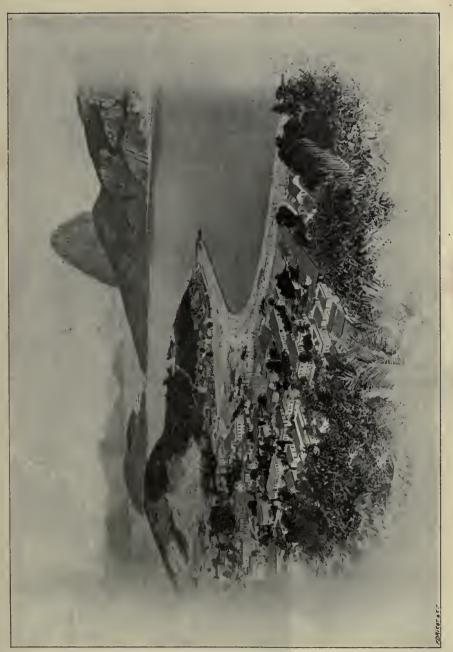
The National Printing Office is another pretty building. — designed by Paula Freitas, a Brazilian architect. The same can be said of the Public Works Department which is one of the best in the city. The new Medical College not yet finished in the Praia da Saudade, in front of Pão do Assucar hill, will do honor to the city both for its size and magnificent front looking to the street that separates the building from the sea.

The Mint, large building in Praça da Republica, imposing front with columns and broad stony stairway. There are some fine bronze ornamentations.

The City Hospital at Santa Luzia shore is the largest of its kind in all South America. Its portic of stone, is of Greek style, and gives a noble appearance to that monotonous symetric building. To have an idea of the size of this hospital it is sufficient to read the following figures showing the movement in that institution during 1902-1903:

Besides this main City Hospital, maintained by a charitable organisation there are, also maintained by the same organisation, the Santa Maria and S. João Baptista hospitals, in Botafogo; Nossa Senhora da Saude hospital, Gambôa; Nossa Senhora do Socorro hospital, Ponta do Caju; Nossa Senhora das Dores hospital, Caseadura. The number of patients in these hospitals averages 550, being 350 in the Sande district, 120 in the S. João Baptista and the balance.

In the beginning of 1903 the total number of patients in charge



RIO, - THE PÃO DE ASSUGAR AND THE MORRO DA VIUVA

of the institution was 1.679 not counting those in the wards of the different asylums it maintains.

Another building worth mentioning is the Military school, a fine specimen of architecture, elegant, nicely decorated, but with general sober lines as it is fit in an educational institute like this.

It is located in an awfully quiet district, right at the side of the Babilonia hill which seems to frame it.

Another place worthy of a visit is the old Emperor's Court at



Rio. - The Military school

S. Christovão, in the district of the same name. It was the winter residence of the Emperor, and the beautiful park around with pieturesque lakes, avenues of choice trees, fine lawns, cascades, etc. is now utilized by the National Museum which is installed there, with ethnographic, archeological and natural sciences sections. The visitor will profit going in there, even if the modest external appearance doesn't please him much with its poor architecture.

Rio de Janeiro has many scientific establishments. One of them is the Public Library with 300.000 volumes not counting tens of thousands of manuscripts, rare pictures, medals, precious doeuments, in a modest building at Lapa Square, running great risks of



a fire. The Navy Museum where an interesting collection of naval-military-history of the country relies is to be seen. The Navy Library also is a modest building. The Public Archives so precious to those devoted to the history of the country has a large number of precious documents. The National College of Fine Arts, opens an exception as to its external appearance, has a classical front, with a majestic portico, looking to a small square in the centre of which is the statue of the celebrated Brazilian actor João Caetano. The building, however, is getting too small for the large number of paintings and marble works, which grows larger every day. The



Rio. - The Ancient Emperor's Residence, at present: National Museum

Music Institute, which is the institute of its kind with the best official reputation in the South American continent. It is a large building just at the side of the Fine Arts building. On the outside has a severe physiognomy. In the interior it has a concert hall hall beautifully decorated by Henrique Bernardelli, the brother of the celebrated sculptor. The organ of this institute is the largest in South America and it was a donation of the celebrated musician Mignez.

Besides the colossal Public Library, there are many others to support the intellectual of Rio, such as the Fluminense Library with 90.000 volumes, in a large four story building in Rua Ouvidor; the Army Library, which, like that of the Navy, also publishes a technical magazine, edited by the major-staff; the Medical College and Polytechnical Academy Schools with 70.000 and 10.000 volumes, res-



Rio. - Monument of the discoverers of Brazil

pectively; the Senate Library which was founded by the late unfortunate Manuel Victorino, with 30.000 volumes; the Congress Library; the Gabinete Portuguez de Leitura Library (a Portuguese association) installed in one of the most beautiful buildings of the city in the D. Manoel historical style in Rua Luiz de Camões near Saõ Francisco Square; the Commerce Library with 10.000 volumes,

installed lately in one of the halls of the Stock Exchange building; the Municipality Library; the Club Brazileiro Commercial Library; as well as those of Germania Club, the Associação dos Empregados do Commercio one, and many other smaller ones.

There is no improvement or industrial benefit that this city of Rio does not enjoy: telephone, telegraph, over 100 periodical publications, important daily papers among which we must mention the Jornal do Commercio, which is, for the material value of its daily edition, as well as for the solidity of its economical resources, one of the first journalistic enterprizes of South America. It was founded about seventy-five years ago.

The city is illuminated by gas, having 15.000 lamps by the different streets of the city and many of the suburbs. There is also a part of the city in the main part of it, illuminated by electricity. An English Company called « City improvement» disposes of the sewage by a gallery system that throws it into the sea after being chemically treated.

The police service is done by a brigade with 4.000 men commanded by a General, the police force being a military organisation. The public aid is exercised by the authorities that maintain an Insane Asylum, a Poor House, a Plague Hospital, a Children Reformatory and other establishments, and is also rendered by 40 private associations as the Irmandade da Candelaria, maintaining Asylums and hospitals, the D. Pedro V, the Terceira Penitencia, the Carmo, and others, most of them religious institutions.

Rio de Janeiro is proud, and has a right to be so, of its Charity institutions, its asylums, its hospitals, its reformatories and foundling institutions. No other city has them in so large a number in relation to its size.

It is worth visiting the Gonçalves de Araujo Asylum in S. Christovão Square, the Lazaros Hospital, by a charming shore, in a fine building, the Beneficencia Portugueza, with large wards surrounded by gardens in Santo Amaro Street, the Bom Pastor Asylum, the Unprotected Children, the S. Cornelio, the Foundling, the S. Francisco, the Invalidos, the S. José, the Old and Unprotected, the S. Francisco de Paula, the S. Luiz, the Deaf and Dumb, the Blind, and dozens of other asylums.

A vigorous trait of the Rio greatness is its manufacturing industries, to which we must add the official establishments which are of industrial nature, such as the Military rifle, powder, cartridges and other war material factories, the government shipyards and stock of material for the navy. Such establishments are as a rule beyond

the city limits, in islands in front of the city or in the most distant suburbs.

The establishments of private industry, however, are spread all over, in the city and in the outskirts, in the commercial streets as



Rio. - Statue of Buarque Macedo

well as in the suburbs, and they represent all that variety of common industries. In the cities we see flat-iron factories, bone buttons, paper boxes, strings and ropes, playing-eards, card-board goods, eartridges, shot, and other factories. There are also breweries, cordial distilleries, eanned goods factories, threading mills, disin-

feetants, neckties, stockings, soap, oils, candles, suspendors, caps, erockery, glass-ware and crystal-ware, perfumery, furniture, paper, matches, shirts, preserved fruit, woollen goods, wagons and trucks, and other factories. There are yet vinegar and soda-water works. pharmaceutical products, mosaic and tiles, safes and stoves works, book-binderies, eigar and eigarettes factories, fruit flour, iron bridges and galleries, hats, shoes, lace, nails, lead pipes, rubber eoats, iron beds and chairs, wire nets, medicinal soaps, acetylene gasometres, coffee improving machinery, sugar, matte (Brazilian tea) factories, rice and grain preparation works, wooden boxes factories. eorsets, clothing, chocolate, printing type, trunks and travellers material, rubber stamps and steneils, images, musical instruments. ineandeseent light veils, ears, brooms, cane baskets, wooden ornamentations for buildings, wax caudles, mica lamp chimneys, asphalt, artificial marble, harnesses, biscuits, shoeblacking, wall paper. picture frames, artificial flowers, leather tanning, jewelry, vegetable oils, seales, ice, thread, envelopes, brushes, flags, bieyeles, umbrellas, fire works, tiu boxes, cement « French » style and common tiles, bricks, collars and other factories.

We do not intend to make special references as to the banks, commercial enterprises, navigation companies, railways, public works, insurances, etc. That would require a large volume, but the city almanaes, some as good as the best in Europe, like the Laemmert one, give detailed information about it. We will neither speak of the primary instruction, in charge of the municipality, of the many colleges and academies. We will, however, mention, the Navy College, Pilots School, Medicine College, Polytechnical Academy, Law College, the Military College and other institutes, no doubt, of importance, but our limited space would not allow it.

* *

The traet of land where is the seat of the Federal Power, was since the foundation of the Brazilian nationality, reserved for that function. There, have been accumulated, during the whole history of Brazil's independent life, and even much before that, the national official establishments, the barracks, the arsenals and ship-yards. There, was centralised the mental, artistic and intellectual direction of the country. To that Capital run all the marine communications, and railways connect it with several States. S, Paulo, Minas, Rio and Espirito Santo have already closed the circle af railways connecting them with the great metropolis. The road of the Central of Brazil Railway reaching the S. Francisco River, Bahia, Alagôas,



Pernambuco, Parahyba and Rio Grande do Norte, which are already eonneeted, will complete the whole system.

Soon we will see some southern connections. Paraná and Rio Grande do Sul on one side, and Goyaz and Matto Grosso, on the other will thus unite themselves to the large net of railway system,



Suburbs of Rio. — Tijuca Forest

the centre of which will always be the Capital of the Republic, to which nature giving it one of the most advantageous location in the planet, assured beforehand the destiny, the greatness of which, we only can conjecture to-day.

The eauses of great social phenomena are numerous. But they



never met in such a large number to explain the superiority of a city over others of its time as they have done in Rio de Janeiro, since its origin, being surrounded both by natural advantages and prodigalities of chance.

* *

Until 1903 very little was done to improve in a satisfactory way the conditions of this great city of Rio de Janeiro, though many



Rio. - The Mint

prominent Brazilians attempted to do it. We could even mention a good number of projects, each one the most worthy of being appreciated, planned by men of advanced ideas. Of all these the most noted were those of the late vice-president Manoel Victorino, which would completely transform the old city, should it be realised, those of Senators Trovão and Alvaro Machado, being also projects of wide scope, the one of Dr. Vicira Souto, an engineer of note in Rio, and so many others we do not now remember. All these projects, howe-



CAPITAL FEDERAL. - PART OF THE CENTRAL AVENUE

ver, were postponed from time to time for several eauses, and did nothing else but to activate the general anxiety of the population that every day claimed londer and londer the solution of that old problem.

When President Rodrigues Alves was elected and went into power in 1902, his first care was to select a man able to undertake that achievement. He appointed for the place of Public Works Secretary, Senator Lauro Müller, an engineer, whose ideas on the



Dr. Gabriel Junqueira, one of the constructors of the Central Avenue

subject were already known for a long time. Once decided that the whole of work required, ought not to burden the ordinary budget of the Government, a loan was raised of £ 8.000.000, abroad, specially for those improvements, adding to this another home loan of £ 4.000.000 contracted by the Municipality of the City of Rio. With these two resources the Government began the great improvements which are transforming altogether the City of Rio de Janeiro.

The Secretary of Public Works after having studied in detail all the projects and ideas until then in mind as to the sanitary improvements and embellishing of the city, submitted to President Rodrigues Alves the general plan of the works, which the Decree no 4.969 on the 18th of September, 1903 declared approved, giving power to desappropriate all grounds and houses needed for such works, and a special fund was reserved to pay for the services.



The S. Francisco church

The main part of this plan was: 1st., the construction of a large elementarial quay for the ships to come alongside, in an extension of 3.500 metres; 2nd, the construction of a large avenue parallel with this quay with 3.500 metres length and 40 metres wide; 3rd, the rectification and prolongation to the sea of the interior canal known

as a Mangue win an extension of 3,000 metres lined by two avenues with rows of palm-trees, illuminated by electricity with 40 metres width each; 4th, the elevation of the railroad-bed to a viaduct 5 metres above the street level, and construction of an avenue on the Francisco Eugenio Street, straight until the Quinta da Boa Vista, the old residence of the late Emperor; 5th, enlargement of water supply for the eity, taking in all the near by sources; 6th, general revision of sewage piping, improving all that service by adopting all modern



Dr Del-Velchio, Engineer

improvements; 7th., the construction of an avenue of 1.800 metres length and 33 wide; 8th, the throwing down of some hills in the city and improving of the quay, (railway, electric illumination, storage houses, etc.) and finally the enlarging of certain cross-streets crossing the great Avenida Central.

On the other hand, the new Mayor of the city, Dr. Francisco Passos, selected by the President to help and complete the work of his Secretary, Dr. Lauro Müller, promoted the enlargement of other streets, the construction of a beautiful avenue — bay-side drive, along the river or bay front, with 7.000 metres length and 35 metres

wide, the substitute of the old pavement of the streets for asphalt and other modern ones, and several other works to aid embellishing the eity, gardens, school houses, etc.

The rejoieement of the population was unusual, the Engineers Club, noted association of technical men, ordered a bronze sign east, with the name of Dr. Rodrigues Alves, the President, and his Public Works Secretary Dr. Lauro Müller, placing it under great solemnity in the seat of their meetings, on the 28th of September 1903.



Rio. - Part of the New Avenue

With promptness the harbour works were contracted with the English firm Walker & Co. of London on the 26th of September, all the work, however, to be directed by Brazilian technical men, under the charge of the noted engineer Francisco Bicalho.

Afterwards the different services were distributed, taking into consideration the prompt execution of the work. Engineer Souto took charge of the administration; Dr. Manoel Maria, the general management of the service; Dr. Bicalho, the chief, the works of the

Mangue Canal, quite a complex work; Dr. Del-Veechio, has in charge the building of the quay and all the hydraulic works; Dr. Frontin took charge of the Central Avenue.

Dr. Müller was the author of that beautiful avenue, one of the prettiest sights of Rio de Janeiro. It was he who first had the idea of connecting the projected quay with the central streets in the commercial district by means of a large avenue and not by means of

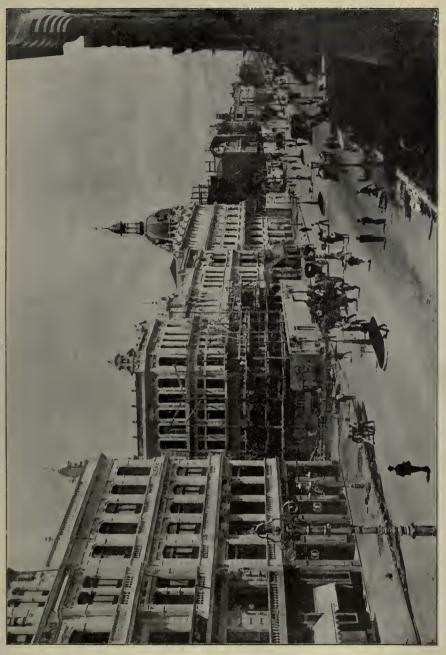


Rio. - New Buildings

tunnels as it was first thought when they considered the Rio projects of reform.

On the 8th of March, 1904, took place, with great joy on the part of the population, the inauguration of the work of that avenue, in the presence of President Rodrigues Alves and other high officials. Then was placed the foundation stone of the buildings n° 2, 4 and 6 of the new Avenue. All the Rio newspapers celebrated this date and the public joined them in that celebration, speaking of nothing else.

As we said above, the idea of the opening of that street was the



outcome of the necessity of allowing an outlet for the movement of the port, as the accumulation and crowding of traffic would be intolerable in the old narrow streets once the quay would be finished.

The Central Avenue cost about 35,000 contos, owing to the high



Rio. - New Buildings

price for desappropriating the buildings that had to be pulled down. Their number was 601, all of them pulled down in less than three months. It was earnest work and was done by double teams of workmen that substituted each other every morning and evening. There were about 3,000 workmen.

The open region, taking the massive of the buildings of the old city, had the length of 1.800 metres, and the width of 73 metres, being 33 for the bed of the avenue and 20 on each side for the new buildings. The plan is in perfect straight line, from sea to sea, which affords a beautiful perspective.

The works run so quickly that on the 15th of Novembre 1905, twenty months afterwards the new street was inaugurated. Dr. Frontin executed with the greatest of successes Secretary Müller's idea.



Rio. - New Buildings

The Avenida Central, which has just been finished, measures 1996 metres from sea to sea. Has 33 metres width, being 19 for the pavement and 7 for each of the sidewalks. The longitudinal profile of the Avenue is as follows: Level in the first 40 m. beginning in Rua do Acre (N.); it rises 3/4.000 until Benedictinos street; follows level until General Camara Street; between this street and Hospicio rises 1/4.000; between Hospicio and Ouvidor is level; between Ouvidor and Sete de Setembro rises 1/4.000; from Sete de Setembro to

Manoel de Carvalho rises 3/1.000; remaining level in all the extension of the Municipal Theatre, where from at last lowers 3/1.000 until Bay-Side Drive.

The side walks have an inclination of 0^m ,15, a little more than $2^{\circ}/_{\circ}$ which is sufficient for the waters outlet.

The pavement of the street bed forms a slight circle areh 0,^m32 high in the centre.



Capital Federal. - Pavilion in the S. Louis' Exhibition erected on the Central Avenue

In the centre of the Avenue they planted 53 Pao Brazil trees, in flower beds 5 metre long and 2 wide, and at a distance of 33,^m33 from one to the other. The Electric light posts with three lamps each, are also in the centre and 55 in number, being at the same distance of each other as the trees are.

On the sidewalks they are also going to plant trees, 173 on the odd side and 160 on the even side. There are also the gas illumination posts 50 on each side.

The buildings lining the Avenue are of fine architecture, having

on an average 20 metres height, there being however a few, with 40, 50, 60 and even more. Those are buildings that would do honour to any large European city.

Once we have spoken of the Central Avenue, we must say something of the other one — A Avenida Beira Mar — (River-Side Drive or Bay-Side Avenue) projected after the Avenida Central, but nearly completed,

This avenue has 7 kilometres in length, it is really a bay-side drive. It begins just where the Avenida Central ends, and follows along the river front through the many curves of the city contour till Botafogo bay, a beautiful curve enclosed by the green frame of high hills.

This beautiful work is due to the Mayor of the eity who is in an admirable way completing Dr. Müller's system of improvements.

Another improvement now in via of realisation is the extension of the Mangue canal. The works executed there are worthy of note. The canalization of the little rivers in this part of the city is made by means of a canal 3 kilometre long enclosed in stone walls crossed by metallic bridges, of artistic style. The old canal had but 1 ½ kilometre in length with 12 metres sections and only a little over 1^m 50 of depth. Now it was extended to 3 kilometres, the section 20 metres, and depth 3 metres. As the ground through which it run was not very steady, they steaded it by means of posts 19 metres deep. The plan of the canal consists of two tangent lines forming almost a right angle, connected by a nice curve. This canal acts as an outlet for the rain waters as well as the waters of the small rivulets of that part of the city. It could not be used for navigation except of very small boats.

Besides the Avenida Central there are many streets worth mentioning, among which are: the *Uruguayana*, 17 metres wide with fine buildings and asphalt pavement; the *Assemblea*, also 17 metres wide probably prettier than the other, having a charming perspective upon the sea; the *Carioca* Street between the square of the same name, at the end of Assemblea Street and *Visconde do Rio Branco*; they are almost in straight line, and form altogether a road of over 2.000 metres length; the *Floriano* Street has 24 metres width and nearly 1.000 length, with its natural extension *Acre* Street; the *Treze de Maio*, 17 metres wide; the *Passos* Avenue, extension of the old *Sacramenlo* Street; the *Inhauma* with 30 metres width. All of them are paved with asphalt and were opened or widened at the sacrifice of 1200 old buildings that were pulled down. Such is the energy with which in the last three years the habitation, sanitary conditions and

aesthetic problems of the Rio city have been taken care of.

The buildings follow the same vigorous impulse. In 1903 there were 900 new buildings constructed in Rio and 400 reconstructions. In 1904 there were 1200 new buildings put up and 800 reconstructions. Rio de Janeiro had then 84.096 houses inhabited while in 1890 only had 47.631. This illustrates the progress of the last few years.

Just now the buildings, both private and public, in Rio, are undergoing a considerable transformation, and while there are to be



Rio. - New Buildings

seen yet in many places houses of the colonial type, all the new buildings are of the most modern designs, showing how the city is becoming European like and how the capital is growing in wealth. Among the new buildings we will mention a few, some finished at time of writing, others, nearly finished, others just started:

The Congress Palaee, the most notable one in all South America, occupying 12.000 square metres, in front of Tiradentes Square, surrounded by *Rio Branco*, *Constituição* and *Gomes Freire* streets. Its cost is estimated at 15.000:000\$000.

The Municipal Theatre, with marble front, bronze decorations and a dome 45 metres high, valued at 3.000:000\$000 built by the Brazilian Architect, Oliveira Passos.

The building of the S. Paulo - Rio Grande, a Brazilian Railway



Rio. - New Buildings

concern, of gothic style, simulating a eastle of middle age times, has six floors, 30 metres of height, estimated at 900:000\$000 built by the Brazilian architect, Silva Costa. It will be one of the beauties of the city.

The Jardim Botanico Street Railway Co., French style, 62 metres

front, 33 metres high, the centre body with 6 floors, the side ones four. It will occupy a whole block, is divided by a gallery, in the style of the Passage Joffroy, in Paris, the Vittorio Emmanuele, in Milan, and Umberto Primo, in Turin. Its cost is estimated in



Rio. - New Buildings

2.000:000\$000. Its architect is Caminhôa and it is the property of Brazilians.

The Naval Club new-classic style, five story high in the main body and four in the side ones. Its architect is Bezzi. It will be one

of the best buildings in the Avenida Central and its east is estimated at 800:000\$000.

The Caixa de Amortisação building, classic style, with a series of beautiful white and rose marble columns, with bronze tops. Its cost is estimated at 1.200:000\$000. Its architect is Gabriel Junqueiro.

The *Jornal do Brazil* building, marble front, large and original dome, 50 metres high. Its architect is Mr. Berna, the proprietors are Brazilians.



Rio. - New Buildings

The Jornal do Commercio building, seven floors, high tower, 62 metres high, stone and marble front. Its cost is estimated at 2.000:000\$000, its owners, Brazilians.

Palace of the Exhibition, the same building as the one representing Brazil at the St. Louis Exhibition, 45 metres high, built by the Brazilian Architect Souza Aguiar.

Guinle & Co. building, beautiful stone front, 8 floors 52 metres high, owned by Brazilians and its cost estimated at 1.000:000\$000.

Docas do Santos building, fine floors, built by the Brazilian Ar-

chitect Ramos Azevedo and owned by Brazilians. Its cost is estimated at 1.200:000\$000.

National Library, stone, marble and iron, five floors, 45 metres high, built by the Brazilian architect Dr. Aguiar. Its cost is estimated at 3.000:000\$000.



Rio. - New Buildings. - The palace of the daily paper: « O Jornal do Commercio ».

The indication of nationality, which we have taken pains to show, serves to illustrate to those who do not know Rio de Janeiro, the efficient contribution that native elements are bringing towards the development and transformation of Rio de Janeiro where foreign capital, intelligence and activity, will find a vast field to ope-

rate upon, with profitable results by the adhesion and aid of the dominant ideas among the natives.

We will not close these few lines on the rapid progress Rio has undergone during the last few years without speaking of an enterprise we referred to above, which has initiated its work and will be the most important of all the improvements the great Capital is going to be presented with.

We refer to the Harbour work the main feature of the plans con-



Rio. - The New « treze de Março » Street

ceived and being executed by the present Secretary of public Works, Dr. Lauro Müller.

Though Rio possessed one of the largest and best anchorage places of the world, by the beauty, depth and safety of the bay, its population has been longing for the last 60 years for these benefits enjoyed by nearly every sea-port city of the world — a dock system alongshore, that the ships might come alongside to load and unload.

This was a general anxiety continually expressed, by every one,

but owing to certain circumstances which can all be reduced to this: lack of a resolute and broad minded government, — the plans and projects for the harbour works were being postponed from time to time in spite of their pressing need. The situation was just this when



Rio. - New Buildings

President Rodrigues Alves invited for the place of Public Works Secretary Dr. Lauro Müller.

We will now give some detailed information about this improvement now under way:

The Rio de Janeiro port improvements work comprises:

RIO. — ANOTHER VIEW OF BOTAFOGO, AND BEHRA-MAR AVENUE

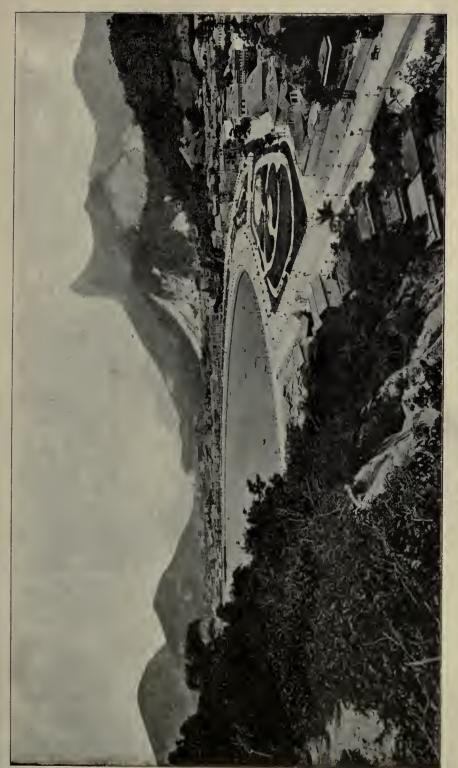
First. — The building of a long stone quay, with sufficient depth for ships and steamers of any draught coming alongside, with a large number of iron landing stairways attached to the quay, fastening posts, double stone-stairway at the curves. This quay accor-



Rio. - New Buildings

ding to the adopted project goes from the extension of S. Christovão street to the neighborhood of the Navy-Yard, comprising the inner bays in front of the Moças, Melões, Sacco do Alferes, Gamboa and Saude old islands and has 3.500 metres in length.

SECOND. - The filling of all the area comprised between the



CAPITAL FEDERAL. - BOTAFOGO AVENUE

future quay and the river front. In some places the distance between these two points is 250 metres as it happens in the Saude inner bay, the depth of the water varying between 4 and 7 metres.

Third. — Dredging till 10 metres distance from the space destined to the setting of foundation caissons, and quay wall, and a band



Rio. - New Buildings

250 metres in width, forming the channel so that ships can come alongside without any trouble.

FOURTH. — The opening of an avenue alongside the quay, measuring 100 metres in width, of which 25 metres are reserved for railway tracks, 35 metres for the building of imports and exports

storage houses and administrations offices, and 40 metres nicely paved and with rows of trees for public thoroughfare.

FIFTH. — Construction of the quay, comprising the most modern machinery used for hoisting, loading and unloading the ships. Two



Rio. - New Buildings. - Offices of the daily paper: « O Paiz »

stations in convenient places with the necessary machinery to furnish electric power to the machinery and electric light for the illumination of the whole quay.

Sixth. — Utility of the neighboring islands as deposits of inflammable goods, coal, and other port exactions, increasing its area if needed, filling up the space between them and near by rocks.

The works of wall building comprising the dredging and filling were contracted on the 24th of September 1903, by the government with the well known house of C. H. Walker & Co., of London.

The work was inaugurated on the 29th of March, 1904, initiating on that day in front of Saude bay the service of dredging the port. On the first days of January 1904 the bottom of the bay has been duly dredged all along the line of the 1st section of quay measuring



Rio. - New Buildings

500 metres and the contractors initiated the work of the wall construction setting the first caisson with the order number -13-.

By the end of April 1905 two sections of wall were ready till the average tide height. On May 1st, in presence of His Excellency President Rodrigues Alves, the Mayor of the City, the Members of the Cabinet, Congressmen and Senators, high officials both civil and military ones, business men and representatives of all classes, the inauguration of the quay work took place, fixing on the external side of the wall a plate commemorating this act. Figure no I shows the sections we spoke of, as well as the inauguration plate attached

to the stone containing the record of the proceedings, newspapers of that day and several coins of the country.

According to the clause XIV of the contract all the work must be finished by June, 30th, 1910 obeying to the following progress:

On the	30th of	June,	1906.						500	metres.	
>>	>>	>>	1907.						500	>>	
>>))	>>	1908.						800	>>	
>>))	>>	1909.						700	>>	
>>))	>>	1910.						1000	>>	balance
	to u	nake n	n the to	atal	of				3500	metres	



Rio. - Construction of the Canal do Mangue

To determine the solid layer at the bottom where the foundation caissons have to be supported, which is a part of the construction system adopted, as well as for the calculation of the total volume of land to be excavated and recognizance of several layers of ground placed upon the solid one, many perforations were made in the direction of the projected quay, and elsewhere in transversal direction, in some points becoming necessary to find out the inclination or profile of those layers.

The system of construction adopted for the quay was, the compressed air one, by means of *caissons* made of iron, identical to those used lately in the port of Antwerp.

Two large floating seaffolds, constituted by two pontoons attached to each other by iron frames, carry suspended by two strong steel chaims, the respective dryers, measuring 12 metres high, 25



Rio. - Statue of Viscount do Rio Branco

metres long, and 6.60 metres wide. Underneath these apparatus they introduce the iron caissons or boxes which have the same dimensions, with the exception of the height which is only 2,^m50. By means of screws adapted to the internal walls of the dryer, and holes in the caissons helped by rubber between these two pieces, a close attachment of the two is operated so that when it all sinks down into the

RIO, -- CAPITAL FEDERAL; VIEW OF THE CANAL DO MANGUE

water, the caisson is water proof. When the lowering fails centrifugal pumps are put to work moved by electricity.

The caisson, the main part of the system of construction adopted, is formed by strong cramp-irons solidly united and supported by steel beams 0,70 thick. The four outside faces are dressed by iron plates as well as the inside under the beams. The caisson is divided into two parts: one constituted by beams and empty spaces



Rio. - New Buildings

left by the spaces of the cramp-irons, and the other slightly arched or vault-like roof, open at the bottom, forming the « work chamber » where later on the workingmen have to get in when charged of the exeavation of the bottom and of the provocation for the penetration of the caissons through the layers at the bottom. For that reason, the roof of the work chamber has four circular openings 0,70 m. in diametre, destined to receive the chimneys for the entrance of the workmen and material.

Protected by the first chimneys in the openings of the caisson's

roof, they immediately fill the upper part of the eaisson with cement or rather beton, forming thus the plate or ground on which the first stones of the wall have to be placed. Then the masons begin the construction of the wall in the interior of the dryer, always supported by ropes and chains and at the proportion it grows the dryer is lowered to relieve the eargo that chains and ropes support. When the work reaches about 4 metres of height, they manœuvre conveniently the floating scaffold by means of the eight anchors of the pontoons, and once in the alignement of the quay, they let the eaisson down, with the work already done on top of it loosening the dryer from everything that fastens it. During the sinking of the caisson into the water they always heighen the chimneys to avoid the entrance of water, so that when the eaisson touches the bottom, these reach their utmost height. On this oceasion they adapt an apparatus, the machinery begins to work compressing the air in the work chamber.

The workmen in groups of I2 to 18, who are relieved every eight hours, descend to that compartment and, helped by syphons which expel what they exeavate or dig at the proportion it gathers in the chamber, they provoke the descent of the caisson through the several layers of the bottom.

Once reached the solid layer and this one being completely clean and levelled, it is immediately filled with cement concrete. When this operation is finished they continue the work of the wall till the height of the average tide. They then loosen the screws that attached the caisson to the dryer, they allow the water to enter the dryer and thus relieved, it is once more attached to the chains which suspend it again and thus is the apparatus ready for the construction of a new section of wall. Each section measures 23,50 metres in length.

The work to finish the wall on its upper part is done during low tides.

Figure n^o 4. — Shows the caisson inside the water ready to be put in proper place under the dryer.

Figure n^o 5. — Shows the eaisson in the aet of entering under the dryer.

Figure nº 6. — Shows one of the floating seaffolds with the dryer completely suspended, and the caisson already attached to its inferior part.

Figure n^o 7. — Represents the hulk « Victor » of 25 tons used for several kinds of work.

Figure n^o 8. — Represents the two floating seaffolds and the hulk « Victor » working.

The work of the compressed air once started continues without interruption until the work chamber is completely filled with concrete. It takes about 10 days of 24 hours. The digging in the interior of the caisson, is made according to the nature of the soil, by means of syphons which work by the same compressed air action, or by means of ordinary apparatus for such work, the diggings being taken out in buckets through the chimneys. When they find rock which needs to be partly levelled so that the caisson can be placed in per-



Port of Rio. - Filling up of the Sea Zone

feet horizontal level, they take the rock out in small stones, little by little, and they make it burst with very small charges of dynamite.

Figure $n^o g$. — Represents several sections of the quay with the intervals left between them, where the connections have to be filled in.

Figure nº 10. — Represents a hoisting barge, used to place the stones on the wall and for preparation of the concrete destined to that portion of the wall that goes up from the average tide height.

Figure n^o 11. — Shows the interior of a barge working in a connection of walls.

The normal type of quay measures 2^m50 high of foundation, 8^m80 from the top of eaisson to the level of low tide, and 3^m60 from there to the top, representing a height of 14^m90. As to its width is 6 metres on the *caisson* and 1:10 on the outside and 1:15 on the inside inclination up to the height of the low tide, from there up the



Port of Rio. - Construction of the New Quay, Crane-boat

external inclination is 1:20 and after a cut of $0^{m}60$ goes up in vertical line, the upper part of the quay measuring $3^{m}02$ in width.

The wall has holes placed at intervals of 100 metres to be used as outlets for the rain waters. On the top of the wall there will be an opening covered with iron to receive the canalisations for the light, water and power.

Until the 15th of December 1905, the contractors had built 16 sections of quay representing 400 metres wall, up to the height of the

average tide or 1^m20 above the lowest tide. The connections, with exception of 5 of them were all finished, and the part already concluded, with top part and all has an extension of 275 metres.

All the space comprised between the wall and the bayside will be filled and levelled with earth taken away from the Senado Hill and sand from the bay. The Senado Hill will be all taken down and its ground levelled. The sand will come from the dredging of the channel, should it be good enough to be used in filling in the ground



Port of Rio. - Construction of the New Quay

according to the Fiscalisation Committee, other wise the sand will be taken from the bay sand-banks which this Committee may designate, until a depth of 10 metres water in the average tides.

The sands will be thrown into the inferior part and upon them the Senado Hill earth will be placed up to the level of the wall.

For the first section that must be ready on june 30th, 1906, the earth to fill in is being taken from the hills right in front and



RIO. — PRIMITIVE ASPECT OF THE PLACE WHERE THE CANAL DO MANGUE WAS CONSTRUCTED

which formed the two islands — Moças and Melões which can furnish about 200,000 cubic metres.

Figure n^{o} 12 represents a part of the work werheas figure n^{o} 13 shows the disposition of the fastening posts.

Figure nº 14 represents the two floating scaffolds in front of the old Meloes island, the earth of which is being taken away to fill in the quay of the first section. On the top of one of the hills is an old



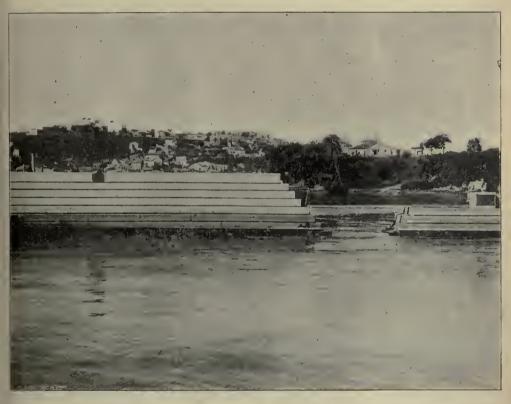
Port of Rio. - Construction of the New Quay

house that serves as the office and residence of the Fiscalisation Committee.

Figure n^o 15 shows one of the places where from the earth to fill in the quay is being taken out.

The contractors to make the necessary repairs in the dredging boats and their apparatus, have two installations; one on the other side of the bay, in Nietheroy, in a place called Ponta da Areia and another in the central point of the works at Santa Barbara island, some 600 metres away from the shore. The former belongs to the contractors, the latter belongs to the government but lent to the contractors while the work of the building of the quay lasts.

In Ponta da Areia are several repairing work-shops where small pieces of machinery are made. These shops are well mounted with locomotives and freight ears, hoisting machinery, places for barges, bridges, machine shops, stone cutters, machinery to break also smal-



Port of Rio. - Construction of the New Quay. Anchoring place

ler stones. There is a quarry back of this place which is exploited by the contractors.

In Santa Barbara island are the stocks of cement, hardware of all descriptions, to make the *caissons* (or boxes for the foundation of each section of wall) and extra pieces for the scaffolds, etc. They are always at work in this island preparing new *caissons*. These when needed are taken to a place under a kind of bridge frame with powerful hoisting and suspending apparatus on the upper part, run by endless serews which take up the *caissons*, hoisting them up,

transporting them to the sea rolling over a track; — and then they are towed until the place where the quay is being worked.

Generally there are always four eassons in construction to be ready for service emergencies.

Figure n^o 16 shows the apparatus that hoists the caissons as we just explained.

Figure nº 17 shows the quay on the 15th of December of last year. It is useless to add that the general plan of the works, as it hap-



Port of Rio. - Filling up of the Sea Zone

pens with works of this nature and magnitude is subject to modifications, not only as to the alignment but as to the process of construction, which may be suggested by the progress of the work.

As a complement to the works which are being executed, they are projecting, to use the islands in front of the quay, embraced by the great bay contourning S. Christovâo shore till Ponta do Cajú, as dry-doeks, coal depots, inflammable storage-houses, and other buildings needed in a first class commercial port.



Port of Rio. — Construction of the New Quay. — View of the works in December 1905

THE STATE OF S. PAULO

The city of S. Paulo, Capital of the State the same name, is built on an uneven ground between the Tieté river (which is its boundary line in the Braz district), and the Tamandutehy, which, in capricious curves goes through this part of the town between it and the upper districts — Campos Elysios (750 metres above the sea level), Consolação (866 m.), Liberdade (779 m.), and Villa Marianna (900 m.).



S. Paulo. - Museum of Ipyranga

Owing to those altitudes the passenger who goes from Santos or Rio to S. Paulo is surprised, to find an unforeseen temperature which requires gloves and an overcoat. So much the better. That invites the people to dress better. We do not see there as we see in Rio, Bahia or Recife, the truckmen and hard working people on account of the tropical climate neglect their clothes, orpresenting themselves bare footed, with dirty ragged garments.



Seen from an upper position the city looks like a sea in all the greatness of its growing vitality expanding itself. It has the form of an irregular polygon, filled with squares, streets and avenues without any geometrical orientation just as Buenos-Ayres or Therezina, but forming blocks which give an idea of several cities connected with one another, bound the city exterior lines. From these grounds start towards the fields and hills located in front nufinished streets which ramify themselves going to new districts like Bom Retiro, Barra Funda, Villa Deodoro, Perdizes, Sant'Anna, etc., and which the electric railway, the telephone, illumination, and sewage net are incorporating gradually to the central nucleus, in an inflexible work of definite appropriation.

In the districts near the Tieté are large and numerous stores, hotels, brasseries, workingmen houses, factories of all descriptions, storage houses, etc. A forest of chimneys throw from sunrise to sunset spirals of smoke into the air crossed in all directions by electrical wires. In the streets is a confusion of vehicles, and men running here and there. There is the noise of human voices, the rattling of the wagon-wheels upon the pavement of the streets, the whistles of the factories all wrapped by dust-clouds which spread themselves all over.

In the centre points boils all the effervescency of the brainy city:— the elegant high-life, the active intellectual men, the bankers, the lawyers, the multitude of the forum crowds, the gay world with its fashionable women, the high tone families in their carriages, the crowds of hasty ones and at last the multitude of the obscure, of the nameless, all of them circulating in the district of Rua Direita, Quinze de Novembro, S. Bento, Rosario Square and ajacent streets, etc. This cannot be called the centre of the city, as S. Paulo has extended itself so very much towards the new districts, where the buildings grow up every day with a richness of marvellous art and good taste.

In these business streets the old style buildings, the big Portuguese houses with plain walls are disappearing under the victory of the evolution of art. The assimilating capacity of the Brazilian race in contact with Italian genius, the Italian colony being one fifth of the population, affirmed themselves in an undeniable demonstration.

Many buildings now are planned and constructed by Brazilians.

It is useless to say that the streets we mentioned above are not the prettiest of S. Paulo, though they present the most lively aspect, either during the day or night time. The avenues and streets that are the prettiest because of their buildings and perspective, are those that belong to the new district of the Capital: the boulevard Burchard, in the Conceição district, where from the largest part of the city area can be observed; the Panlista Avenue, open upon a longitudinal esplanade, above the other districts, is not as yet all built up, but it already presents some very pretty palaces with different architectonic styles surrounded by gardens, — they are magnificent mansions,



S. Paulo. — Largo da<u>l</u>Sé

princely residences; — the Barão de Piracicaba street, a kind of grove, straight and wide; the Glette street with magnificent buildings, among which is the Sagrado Coração church with a 40 metre tower with the image of Jesus on top in golden bronze, and it can be seen from nearly everywhere in the city; the Tiradentes, a pretty avenue of about two kilometres long, but very irregular in its width, lined by superb buildings, some of them large ones, like the Polytechnical College, the vast Police Force barracks, the Model College and others, this street is crossed twice by the Tieté river; the Bambus (cane) grove, a wide street also lined with fine buildings; the Rangel Pestana Avenue, with a width of 25 metres, an extension of

1,580 metres and prolongated with the name of Avenida da Intendencia for another length of 1,500 metres and the same width.

Among the public squares we must mention in first place the one in front of the Luz Railway station, the enormous public garden, beautifully and most earefully treated, with a profusion of flowers pretty as dreams, and a pretty lake. This is the only municipal garden worthy of the name.

The Rosario Square is not so wide as one would think because of its fame, but it is a centre and the principal centre of the Capital, surrounded by eandy-stores, bar-rooms, eigar-stores and other shops. This is the place where the active population of the city have their rendez-vous. This square and Quinze de Novembro street are in



S. Paulo. - The lake of the Public Garden

S. Paulo, just what S. Francisco Square and Rua Ouvidor are in Rio de Janeiro.

Another pretty and much wider square is the Republica one, dominated by the pretty building where the Normal College is. There are other squares like the Municipal, Paysandu, S. Francisco, — with the statue of José Bonifacio, — Goyanazes, Carmo and others, but lack the pretty gardens and arborization that embellish so much the squares of Belem, Capital of the Pará State.

Excepting Bello Horizonte, no other Brazilian city has public buildings with such an architectonic beauty, none also presents such a large number of them.

It is impossible to do about S. Paulo, what we have done about the other cities we have spoken of in this book: — to describe minuciously their churches, monuments and buildings worth mentioning. Only in the first 12 years of the republican form of government, S. Paulo spent in new buildings for its Capital 200.000:000\$000 aecording to official data.

And what has been spent in public works fike railways, sewerage, board of health, schools, etc., in the interior cities reaches an amount over 300.000:000\$000 in ten years.

The general progress of the state represented by its splendid Capital and by the principal cities of the interior, in the volume of factories, farms, banks, large buildings, railways, etc., not only places S. Paulo in front of all the other States of the Republic but its civilisation is over 20 years ahead.



S. Paulo. - da Luz Station.

The city of S. Paulo had in 1850 about 30,000 inhabitants, in 1885 had 45,000 inhabitants, by the census of 1890 it had 65,000 inhabitants and by the one of 1900 not less than 240,000. Its private buildings are of modern architecture, the Italian style predominating. In majority are residences inhabited by one single family, there being very few houses where more than one family live together.

In the modern part of the city, what means in the largest part of the city, the houses have their gardens at the side or in front.

All the streets are illuminated by gas, 4.820 lamps, the central streets being illuminated by electric light, having 5.000 incandescent and 104 are lights, and are all paved with stone blocks.

In 1904, S. Paulo had 25,000 buildings in the city with a first class water supply, the water dams and works being a monumental work of art. The tramway service by electric traction, is the best in all Brazil owned by one of the most powerful companies in the country — The Light and Power Company — an American concern. This company placed 174 kilometres of tracks in the city and furnishes power to al most all the large factories of S. Paulo: — glass works, threading mills, breweries (the largest in the country), eigar factories, etc., with a total of 8,000 horse power.

There are also tramways by animal traction, and two steam ones, going to the suburbs, telephone service with over 1,000 subscribers,



S. Paulo. - Government palacelof S. Paulo.

telegraph, 30 newspapers: — dailies, weeklies, magazines, periodicals of all descriptions.

Among its buildings worth noting are: the Ipyranga monument unequalled in the whole country for its dimensions and imposing architecture, the group of the Palaces of the different Secretaries of the Government which are beautiful buildings: the Agriculture one in German style, the Treasury one, covering 700 square metres made by the Brazilian architect, Ramos Azevedo, the Justice one, at the side of the Governor's palace in roman-doric style also built by a Brazilian architect.

The Luz Station is the most beautiful building of its kind in the whole South American continent. It is as large as it is pretty and has

an elevated tower. It is made of red bricks and tiles in the gothic-scottish style. It is in front of the public garden, which is much like the Brussels park. We were told this station cost over 4.000:000\$000. There is a constant movement of cabs and carriages about the main entrances. The aspect of this building is one of those, that once impressed in the travellers mind, is not easily forgotten.

The Luz barracks, occupies a whole square, is illuminated by electric light, and this pretty architecture is a model of its kind. The ample Polytechnical College, with its beautiful front, wide, enor-



S. Paulo. - S. Bento Place.

mous with its three distinct bodies of Roman style. The Luz school, the Normal College are true palaces, erected in honor of Art and public instruction.

In no other South American city we find such a large number of beautiful buildings devoted to public instruction.

The churches are numerous, but only the modern ones present artistic effect.

The public theatre, now being built will be in size and magnificence well worthy of the other monuments of S. Paulo. Its cost was valued at 3,000:000\$000. It can be compared with the first theatres of Europe. Its front, rich in decorations, in the structure of its whole,

is classic and can be classified as Louis XV style. As to its architecture, it preserves the traditions of the Italian classics by the sobriety of the lines of its whole.

The place for the musicians is placed below the level of the orchestra seats in the audience, according to the system originated by Wagner.

The orchestra seats capacity is a little smaller than those of European first class theatres, as the Grand Opera of Paris and Vienna.

The progress of the scientific institutions, the culture of the cities and the public instruction in all the State is notably superior, and in an elevated degree, to the progress of other sections of Brazil.

The late L. Couty, biology professor at the Polytechnical Academy of Rio, having promised some time ago that he would demonstrate the equality of the S. Paulo ex-province to the Buenos-Ayres province, wrote:

« En parlant du recensement de la province de Buenos-Aires, nous nous étions engagé à faire voir que cette province si florissante et si rapide au progrès avait son égale au Brésil, S Paulo; nous nous étions trompé; S. Paulo n'est pas sculement égale : elle est, à certains points de vue, supérieure à Buenos-Aires ».

« Speaking of the census of the Buenos-Ayres province, we were engaged in proving that that province so blooming and of such a rapid progress had its equal in Brazil, S. Paulo. We were mistaken. S. Paulo is not only equal, it is from certain points of view superior to Buenos-Ayres ».

But, the speedy growth of S. Paulo is such that the economist who is surprised of it having multiplied six times its producing energy in 20 years, when Buenos-Ayres in the same period didn't succeed to do any better than double it, added: « If the other provinces of Brazil had developed their work as S. Paulo did, that country would furnish to-day (1884) 10,000,000 bags of coffee instead of the 5,000,000 it produces. »

Well, it was not necessary for S. Paulo to wait another 20 years by itself, to attain that figure of agricultural production, what Luiz Couty didn't think possible to be obtained without the aid of the other twenty provinces.

* *

Public Instruction. — The Scientific Departments and Institutes, the technical ones or mere theoretical ones, have an importance in S. Paulo that they have not in any other part of the country.

Its Polytechnical College is even superior to that of Rio, by the magnificence of its laboratories, by the practical character of its programs of study and even by the imposing feature of the building itself. Its Agricultural Pratical Schools have no equal in the whole country, and some of them such as the school of Batataes, are exclusive property of the municipality; its demonstration fields are so many other practical schools, and have nothing to fear when compared with identical European institutes. The Agricultural Institute is also one of the best establishments of its kind. As to the Botanical



S. Paulo. - Polytechical College

Garden it suffices to repeat these topics which Mr. Benjamin F. A. Lima not long ago wrote:

« S. Paulo is a lucky State.

All of its scientific establishments, all of its hygienic institutes are a niceness of progress, with what there is of most perfect and modern in its kind. Thus, the Polytechnical Academy, the Isolation Hospital, the Vaccination Institute are witnesses of the great progress of the State.

We visited lately the Botanical Garden and while this establishment is but a section of the Geographical Commission, the works executed by Dr. Albert Loefgren are of extraordinary importance

for the Brazilian flora and show very well that it is under the direction of a learned man.

The national and foreign plants nurseries, the hot-houses, the grafting of plants, everything is arranged with scientific orientation, offering the most methodic order in the several branches of cultivation practiced there, and leaving a pleasant impression in the visitors mind even if he knows but little about botany.

Setting aside the importance of the new institute, the kindness of its director and his family make a visit to that establishment most pleasant.



S. Paulo. — « Prudente de Moraes » Model school

Its library is a repository of everything there is of best in that branch of natural sciences.

The collections of insects both harmful and useful to agriculture, form already a large contingent of useful knowledge for the Brazilian farmers.

Observations of atmospheric conditions and soil temperature are made by registring apparatus carefully installed.

The illustrious director initiated a series of microscopical observations upon the contexture of the best Brazilian lumber, a most interesting work.

It is enormous what S. Paulo has achieved running the expenses of scientific departments and researches for the study of meteorology, geology, botany, geography of the S. Paulo State. It exceeds the amount spent for this purpose by all the other States together. In S. Paulo such services obey to an official, methodic and efficient organisation. They are services created and kept by the State.

The libraries and newspapers appear in every city, in every

village and every district of the State. During 1903 only, the agricultural and industrial departments distributed some 100.000 eopies of pamphlets, bulletins and circulars containing practical instructions for the public. In this State are 212 newspapers and periodicals. In proportion to the number of its inhabitants it is the state that reads and writes the most. One fifth of all the Brazilian press is within the boundary lines of S. Paulo State. No other has so many libraries or book stores. It is the largest book market in the country after Rio de Janeiro, the Capital of Brazil.

No other possesses such a large number of schools, relatively to



S. Paulo, - Normal School

its population. Having only one third of the population of the State of Minas, it has nearly as many public schools as that State has.

There were 2558 grammar schools in the State of S. Paulo during last year with 57.002 students.

In each municipium there is besides those schools one high school with professional classes for each group of ten grammar schools.

The buildings for the grammar schools in the interior are true monuments erected to public instruction. They are in Santos, Lorena, Piracicaba, Itapetininga, Amparo, Guaratinguetá, Pindamonhangaba and other places and they ought to serve as a stimulation for the other States.

In the Capital there are the following establishments of instrue-

tion, private and public: Pharmacy College, inaugurated on the 11th of February 1899; the Auxiliadora Orphan Asylum; the Christovão Colombo Orphan Asylym; the D. Anna Rosa Institute; the Sagrado Coração Lyceum; the Lyceum of Arts and trades; the Seminario das Educandas; the Gymnasium; the Model School, annexed to the Normal College; the Prudent de Moraes, in Luz; the Maria José, in Bella Vista; and two other ones in Braz and Carmo.

* *

Railways, Navigation, etc. — Even in this regard S. Paulo is one of the first States of Brazil. Not long ago a Brazilian writer said: « In the Brazilan federation the State in which private initiative got ahead of the one of the other States, as to the development of their railways, is S. Paulo. » Notwithstanding, we must note that that movement which is the advance agent of the progress of the old province, took place, without precipitation, at the proportion that the farmers arms were extending the eoffee plantations which cover vast tracts of land with their thick branch and foliage, as a proof of the feenndity of the Brazilian soil in that region.

There are in this State 4.136 kilometres of railway, of which only 1.116 kilometres are railways belonging to the Federal Government. There are 502 locomotives, 530 passenger-ears and 6.883 freight ears.

There are in active construction 316 kilometres of railway tracks. Here is the general table of the railway lines in the State of São Paulo:

GENERAL TABLE OF RAILWAY LINES, BOTH FEDERAL AND BELONGING TO THE STATE, IN S. PAULO

DESIGNATION	FEDERAL CONCESSION	STATE CONCESSION	TOTAL
	k	k	k
Running	1.116	5.020,100	4,136,100
In Construction		516,000	516,600
and not presented	1.878	280,000	2.158,000
Totals	2.994	5.616,100	6.610.100

But the following table furnished us by Mr. S. das Neves, a civil engineer, is a better proof of the value of the S. Paulo railways:

2010	YEAR 4900							
COMPANIES	INCOME	ENPENSES	BALANCE					
S. Paulo Railway	20.122:024\$680	9.166:098\$600	10.955:926\$080					
Paulista	22.014:918\$890	8.954:499\$702	45.080:419\$188					
Sorocabana e Ituana	9.675:541\$780	6.669:986\$820	3.605:554\$960					
Araraquara	225:953\$360	177:456\$600	49:516\$760					
Itatibense	144:667\$330	106:428\$026	58:239\$304					
R. F. Campineiro	252:259\$050	215:914\$524	56:524\$506					
C. A. Funitense	75:522\$090	74:948\$990	Def. 1:626\$900					
Dumont	225:180\$100	156:486\$500	88:695\$800					
Rezende-Bocaina	49:108\$420	55:897\$484	Def. 4:789\$064					
Bananal	65:453\$600	61:852\$659	5:600\$950					
Dourado	18:578\$520	26:973\$850	Def. 8:395\$350					
Mogyana	17.544:548\$701	9.456:0578572	7.908:511\$129					
Bragantina	576:552:\$150	295:816\$791	80:755\$558					
Total	70.559:832\$121	34.755:814\$859	55.806:033\$329					

These figures went away up in 1903 in the same roads, presenting the following totals:

Incomes .				84.293:658\$280
Expenses				31.998:000\$695
Bafance .				52.295:657\$585

Besides its railways S. Panlo maintains some navigation lines: the Mogy-Guassù (60 kilometres); the Ribeira de Iguape (154 kilometres); the Piracicaba and Tiete rivers ones, not speaking of the steamers for the coastwise navigation, starting from Santos, the outlet of the State.

* *

Police force and Charities Department. — The police force of S. Paulo is the best organized in the whole country. It is formed by a brigade composed of two infantry battalions, a cavalry company, an organization of civic guardsmen, a firemen department, with a section of nurses for public aid and ambulance service in the Capital and two infantry battalions to do police duty in the interior.

There are in all 5.000 men under the command of a colonel of the Federal army.

The uniforms are first class ones, and they are armed with Maumser rifles. The eivic guardsmen do their police duty generally unared only bearing the police badge and by the selection of these men, and their good behavior while discharging their duties, this organization enjoys moral authority towards the people.

If there is a South American State or province where Sanitary services and public aid are a reality, this State of S. Paulo is the one. Not long ago an Italian publication said about this branch of public service: « The State of S. Paulo has a sanitary service which can be compared with that of any other country even of those considered more advanced ».

There is a permanent corporation of Sanitary police, composed of physicians, well paid, inspectors and assistants, who keep a close watch in the Capital and principal cities. There is a Sanitary code regulating and deciding all the questions relating to public health. There are several establishments installed like in Europe, as the Seroterapic Institute, the Bacteriological Institute, the Chemical and Bromatological Analysis Laboratory, the Isolation Hospital, the Demographic Hospital, the Central Disinfectory, the Pharmaceutical Laboratory, the Pasteur Institute and others, placing thus S. Paulo the first on the list of the States having the best Sanitary organization.

As to public aid, properly said, we must mention the following establishments not needing any details, as it is well known the care that presides the management of public services: Charity Hospital, Insane Asylum, hospitals in all the cities of the interior of the State, like: Bananal, Casa Branca, Campinas, Franca, Iguape. Gnaratinguetá, Jacarchy, Lorena, Mogy das Cruzes, Pindamonhangaba, Piracicaba, S. Carlos do Pinhal, Santos, Silveiras, Taubaté, Itú.

* *

Industry, production, commerce. — The most advanced State of Brazil as to its manufacturing industries, excepting the Capital of the Republic, is yet S. Paulo. Its factories multiply themselves in a progression and variety really remarkable. The number of factory hands, men, women and children at present working in S. Paulo is more than 50,000.

There are factories of the most varied industry, mostly moved by steam, a considerable number by electricity, others by hydraulic power, etc. Everything is worth noting from the large sugar factories of Piracicaba, Raffard, Engenio Artagas, to those of mineral waters, wines, vinegar, perfumes, chocolate, starch, biscuits, beer, preserves. In the line of glassware, crockery, crystals, bottles, etc.,

the manufacturers of S. Paulo imposed themselves to the Brazilian markets by the superiority of their goods. The works in marble, tiles, pipes, enamel, bricks, cannot be exceeded. There are several important cement factories, we will mention only, however, the Rodovalho one, the products of which have won fame. The threading mills, eotton, silk and wool are important and there are also in the Capital two large coffee-bags factories known as Penteado with about 1,000 hands. In this threading mills line there are: the Nossa Senhora da Ponte, in Sorocaba, with 500 hands; the Mooca; the Prudent, with 200 hands; the Santa Rosalia, moved by electricity; the S. Roque, with 500 hands; the Del Acqua, in Osasco; the S. Bernardo; the Reyman R. & Co., also in S. Bernardo; the Votorantin, in Soroeaba; the S. Martinho and others. Working in furniture we mention: the Santa Maria; Laverias; Carlos Lohol & Co.; Edward Waller, school furniture; Brothers Reffinotte, also school and domestic furniture; Antonio Masso, show-eases and closets; Almeida Guedes and others.

The breweries are: the Antartica Paulista, one of the most important in South America. Its buildings occupy 8.000 square metres and produces four million litres of beer. The Bavaria brewery is as important as the Antartica.

It is not necessary to give account of the factories one by one, it suffices to give the names of the most important ones: One aramina threading mill, (the only one of its kind in South America); I glass lapidation; 1, soap and grease; 1, blank books; 2, looking-glasses and crystals; 1, toys; 2, shoe blacking; 7, shoes; 1, musical instruments, (adopted by all the bands in the State); 1, statues; 1, pianos; 1, fruit flour; 5, book binderies; 1, nails; 5, leather tanning; 5, sweets; 4, sugar refineries; 2, fine soap; 1, artificial flowers; 2, chemical products; several, coffee roasting; 1, bronze foundry; 1, bells and brass articles; 1, hats; 1, sanitary pipes and tiles; 3, vegetable oils; 2, flour mills; 1, slippers; 2, sawing mills; 1, cement and crockery; several distilleries; 1, canned goods; 2, powder; 3, agricultural implements; 1, matches; 3, ready made clothing; 1, glassware and bottles; 1, marble articles and lime; 1, children's food; 2, string and ropes; 4, gloves; 1, paper; 1, priests apparel; 2, apparatus for water and sewerage; 2, pietures frames; 1, eardboard; 7, tinplate goods; 3, tranks; 1, lead pipes; 3, iron works; 2, mineral waters; 6, men's clothing; 9, brooms; 1, baskets; 4, food products; 1, awnings; 6, matresses, 1, candles; 2, optical instruments; 3, economical stoves; 3, straw or cane furniture; 2 pulp making; 1, earbon sulphureto; 2, eandy. All these factories are mechanical ones. There are many others, smaller ones, all through the different eities of the State.

COFFEE. — The great strength of S. Paulo rests on the powerful, ample basis of its agriculture, the productive energy of which has no parallel in the United States of America. The wealthy productivity of the soil got for the eoffee a reign, as it can never have in Asia, Africa, Central America, and even in some of the Brazilian States.

S. Paulo knew coffee half a century ago, but that cultivation began to receive impulse when the railways spread west-ward in 1825.



Coffee farm-house to the west of S. Paulo

The initiators of this conquest were Brazilians, natives of S. Paulo, with which they gave a prominent place to Brazil in the world interchange, assuring for it a kind of monopoly of that precious product.

From that date the production is for ever increasing. The farmers, all Brazilians, in the beginning used the African slaves to work their grounds. In 1888 the slaves were free and the work began to be done by European immigrants, most of them Italians. The latter is a good immigrant.

A Brazilian, a native of the Minas State, called Dumont, went

COFFEE EXPORTS

FROM THE PRINCIPAL PRODUCING COUNTRIES

Annual averages by thousand bags weighing 60 kilos each

BRAZIL	AMERICAN	COUNT	RIES	ASIA			
Santos	Columbia, America Central, Mexico, Equador	Veneznela	Haïti	Java	Ceylao	Indias e Philippinas	
\$8-088	875	625	500	1350	350	375	
06-9881	990	675	505	825	135	310	
3250	1365	990	195	635	60	270	
00061 V S S S S S S S S S S S S S S S S S S	1600	1135	400	630	11 25	250	

Scale 1 m/m lo 10,000 bags.

away west in this State and there established the largest coffee plantation in the world. Others imitated him, though in more modest proportions, and to-day S. Paulo has 659.960.060 coffee trees of all ages.

The area occupied is 300.446 alqueires and there are yet, to be disposed of, in the farms that are being cultivated, 392.415 alqueires of grounds appropriated for new coffee plantations. This means, that without needing to come out of the region where coffee is cultivated, within the limits of that part of the State already populated and served by the best means of transport, it disposes of grounds for the production of more than the double of what it produces to-day.

From 1880-1881 to 1884-1885, or, from 1895-1896 to 1899-1900 the average annual production of Brazil increased from 5.900.000 to 9.690.000 bags, while in Africa only increased from 125.000 to 225.000 and in Venezuela Colombia, from 2,175.000 to 3.325.000.

Santos exported an average of 1.755.000 yearly from 1880 to 1885 and from 1895 to 1900 this average went to 6.020.000 bags (of 60 kilos) with an estimate for the erop of 1905-1906 of 9.500.000 bags, the total computation of the whole Brazil being 13.125.000 bags, and of the whole world 16.125.000. No doubt these figures illustrate in a striking way the extraordinary coffee producing capacity of Brazil.

The development and value of the S. Paulo coffee production can be better demonstrated by the graphic exposition that we print here.

It will show how the coffee exports through the port of Santos (not computing then the exports from Rio, Bahia and Victoria) was increasing while those of the producing centres of Asia and America remained stationary or diminished, crushed by the S. Paulo competition.

In spite of that increase of production and exportation of coffee, the State of S. Paulo, had yet time and energy to send to the markets several other products, some in large quantity like rice, sugar, tobacco and some grain.

We hear the noise of the discontented and pessimists cursing the coffee, speaking of crisis, a curious crisis that supports the cost of monumental works and feeds an active commerce.

In 1900 S. Paulo exported products of its agriculture to the value of 264.099:577\$113.

Do you want to know how much it exported in 1901 in the height of the crisis?

The official value of goods exported by the port of Santos during

1901 was 291.974:103\$295. These exports from Santos come from different States in these proportions:

S. Paulo					276.060:2188003
Minas Geraes					15.729:058\$690
Goyaz					118:115\$600
Other States		٠			66:713\$000
	,	l'ot:	nl.		991 974-1058998

These figures would go over 300.000:000\$000 if we should add to them the not small amount of goods that go to Rio de Janeiro instead of Santos by the Central of Brazil railway.

And the manufactured products?

The principal port by which S. Paulo exports its goods is Santos, one of the best of the coast because of its docks and apparatus for loading and unloading.

DURING 1903 ENTERED THIS PORT:

						ST	EAM SHI	PS		
NA ¹	FIO	NA	LITII	ES			Quantity	TONS REGISTER	CREW	
German							137	280.726	5.886	
Austrian							15	22.388	539	
Argentine							5	3.773	105	
Brazilian							303	178.475	12.428	
Belgian							4	8.906	152	
French.							77	138.180	4.432	
Spanish							18	32.569	1.204	
English							192	348.604	0.986	
Italian .							55	117.885	4.075	
Russian		٠			٠	•	1	1.210	25	
			To	tal			807	1.132.716	35,530	
	_					SAI	LING SH	IPS		
German			,				3	2.357	46	
Americain	1.						4	5.020	55	
Brazilian							42	2.814	267	
Danish .							2	582	19	
Spanish							5	2.681	50	
English							9	3.220	77	
Russian							1	578	8	
Swede-No)ľ¥	veg	gian		٠		8	5.569	81	
Pontoons					٠		124	_	_	
			To	tal	٠		196	18.021	603	

The loading and unloading of goods on the Santos quay, during that year was 1.117.857 tons against 766.912 in 1900. The Custom House revenue was:

 1905
 ...
 30.593:410\$000

 1904
 ...
 52.955:610\$000

 1905
 ...
 56.824:385\$000

Always increasing, always progressing!

The Brazilian flag during 1903 had an increase of 36 ships, 26,000 tons of goods more than the preceding year in the port of Santos.



Santos. - Hospital of Santa Casa de Misericordia

THE IMMIGRATION. — The eause of the great development S. Paulo has had, is principally due to the immigration of European blood which has activated its general circulation lately. This great transfusion of European blood gave to the work of S. Paulo a strong impulse.

The aspect of the Capital of S. Paulo is to a certain extent the aspect of an European city, with its types, customs and comfort.

The same happens through all the interior.

From 1827 to 1900 S. Paulo received no less than 969.230 immigrants from Europe, including 138.226 third class passengers. About seven tenths of these were Italians.

« On account of its territorial surface, no other region in South America received so much immigration, » said Dr. Eugenio Lefevre, of the S. Paulo Agriculture Department, and added: « The Argentine Republic with 2.885.620 square kilometres of territory received from 1857 to 1899, only 2.564.391 immigrants, which is less than one per square kilometre, The State of S. Paulo during the same time with a surface of 250.000 square kilometres received in proportion four times more than Argentine. »

The efforts employed by S. Paulo to attract to its territory an efficient current of immigration from Europe, were such that in 1871 from a Budget of 1.500:000\$000, it devoted an appropriation of 600:000\$000 to the immigration service alone.

During the years 1865 to 1898 the entry of immigrants in groups of five years was as follows:

١	ear	s				Immigranta
1865	to	1869				1.160
1870))	1874				1.275
1875	>>	1879				10.455
1880))	1884		٠		15.899
1885))	1889				168.289
1890))	1894			٠	320.315
1895	>>	1899				420.296

Until to-day the percentage of those who go away is 34 1/2 0/0.

The current of immigration is always in the increase, and the State does not spare sacrifices] to keep on increasing it. Let us see the statistics of 1900-1901.

IMMIGRANT PASSENGERS.

Years.				Entering.			Sailing.
1900.				27.659			58.141
1901.	٠			75.845			40.707

Of these immigrants 11.693 in 1900 and 22.133 in 1901, eame to S. Paulo at their own expense and this proves that the sacrifices the State has made could be dispensed with and the European immigration eurrent will keep on coming of their own free will and at their expense.

* * *

The Cities of the State of S. Paulo. — No other State presents such a large number of beautiful cities as S. Paulo does. We can even say that some of its interior towns are more advanced, far more so, than certain capitals of the States of Brazil.

It has 22 cities illuminated by electricity and four by gas.

There are 25 places in the State with Water Works, four others with this department under way, placing the pipes under ground, three amplifying their service, and 14 with plans approved only, awaiting the arrival of the material which is furnished by the State.

Have sewerage service: the Capital, Santos, Campinas, Araraquara, Jahu, Ribeirão Preto, Piracicaba, Itapira, Bragança, Monte-Mór, ten places in all. With sewerages initiated and working on its installation there are Rio Ctaro, Sorocaba, Pirassununga, Taubaté, Limeira, and Amparo, six in all. With approved plans, eight: Espi-



Santos - 7 Setembro Street

rito Santo do Pinhal, Guaretinguetá, Lorena, Botucatu, Mogy das Cruses, S. José do Rio Pardo, Caçapava and Tieté.

Mogy-Mirim has the works initiated but suspended for several years.

The material of glassy crockery mass furnished by the State to the localities which are going to do this sanitary work, is all of home manufacture, and in its largest part made in S. Paulo.

Nearly every one of the cities above mentioned have public buildings of first class, hospitals, railway stations, newspapers, theatres, factories, etc.

We will speak only of the most important ones.

SANTOS. - PANORAMIC VIEW OF A PART OF THE CITY

Santos. — Those who go from Rio to the South, always follow a sea-coast full of curves, with several little bays, some of them destined to perform a great role in the future, like Ubatuba, S. Sebastião, all that coast shaded by high and uniform elevations of the Serra do Mar (sea ridge of mountains) which looks like an enormous wall defending the coast in all its extension till the front of the Bertioga bar where a large tract of the continent, separated from it, opens with the name of Guarujá, a sheltered passage lined with small



Santos. - Real's Centro Portuguese building

islands, at the bottom of which is Santos, the organ of appropriation and expropriation of all the S. Paulo State.

It is its safety valve.

It is not the largest city of the State, it is perhaps the third, or fourth as to the number of inhabitants. As a city, and as to its urbane organization, its function of being an outlet of the enormous production of the S. Paulo State, it has won a great importance before all the others. Besides, there are the hydraulic works built in its port, placing it at the head of all other Brazilian ports, as to the regularity of its commercial operations, can do no less than increase that importance, so that, as to the bulk of its world interchange, Santos has become one of the most noted ports of South America.

In Brazil is only second to Rio de Janeiro. It is S. Paulo's door at the ocean.

The city extends itself over plains with beautiful sea-shores like José Menino with beautiful residences, picturesque buildings, a splendid hotel, which looks as if stolen from some beautiful European summer resort. The oldest part of the city is the one between the docks and Quinze de Novembro Street. It is tortuous, filled with lanes as in the old cities. The new part of the city spreads itself towards the South, South-east and towards the enormous areas conquered from the sea by the Empreza das Docas, around the nice hill crowned by the Nossa Senhora de Mont-Serrat church.

In the business streets, especially Quinze de Novembro one, filled with banks, offices, stores, bar-rooms, is a whirlwind of human waves, running here and there, as the largest part of the business is done between the arrival and departure of the S. Paulo train, because the majority of merchants go to S. Paulo in the evening, running away from the heat and the dust of Santos.

From 10 in the morning to 4 in the afternoon is the most earnest activity, people do not run, they fly. The sweat dampens the collars, the converses are resumed to the exchange of monosyllables, as it is necessary that everything be finished before the last train starts. Every foreigner notices on the first days, this social aspects of the city impression, thus translated by a writer: — « the city has the appearance of a person just finishing and closing all his business for a long trip, for a rest, for a vacation, on the eve of a holyday season. There is not that business almost regulated and calm, of the Brazilian commercial markets. There everything is done in a hurry, in anxiety, in earnest, it must be a fever if it is not anguish.

Through the other streets work is disputed with the same eagerness as in the Quinze de Novembro street. Heavy four wheel trucks run here and there overloaded with bags of coffee, and from the railway to the docks these wagons cross our way with all their haste and noise threatning running over us. At the door of the storage houses the horses have their rations of straw while the trucks are loaded. Hereulean Portuguese and negroes, sweating, half naked, barefooted go about running in small but swift steps with one or two bags on their backs over their heads from the storage house to the truck at the sound of a singing tune monotonous and savage like. We hear the noise of the wooden shovels handling the coffee in the storage houses. This is in the active centre of the city. Let us see the other places.

On the way to that beautiful sea-shore « José Menino » there are extended in parallel with each other two wide and long avenues, — Nebias and Anna Costa, with a length of nearly four kilometres, well paved and illuminated with carbonic gas like the rest of the city. Pretty streets cross these avenues now only partly built and which will in the future be gradually taking active part in the movement of the central districts. Transcars overloaded with passengers take to this region of rest the people that ended their duties, and come back running unceaselessly through the business streets, filled with noise of the wagon-wheels, ambulant venders and



S. Vicente. — Monument of the 4th century of Brazil, erected where Martim Affonso landed

newsboys. There in that district move around busy in their work the anonymous workmen.

The Empreza das Doeas which built the improvement of the port and made the sanitary rehabilitation of Santos, spoiled a little the beauty of their work, building ugly storage houses covered with zine in the entire front of the eity, so that not only the eity loses somewhat in its appearance but those storage houses prevent the air from circulating in the streets that lead there.

But as « every evil is the beginning of good », that so little comfortable preeminence impelled the inhabitants of Santos to direct

their cares to the beautiful sea-shores: S. Vicente, José-Menino and Guarnjá.

The latter is a sea-shore place in the style of those of the South of Europe. To go there from Santos we take a small launch and after a short sail, half an hour railway ride takes us to the most pieturesque summer resort of South America. A sea-shore of white sand, pretty and long streets lined by chalets (wooden cottages) more or less of the same style, (Queen Anne cottages), the Casino, the large hotel with its wide verandah contemplating the honest and distant



Santos. - S. Paulo railway station

fury of the sea, that endless sea, and more pleasant than all that, the aristocratic circle of summer residents in light clothes — that is the pretty picture of that charming summer resort.

From S. Paulo, from all over Brazil, families and tourists pay their visit to Guaruja the panorama of which begins to become celebrated as those of European resorts in travellers albums, postal cards and magazines.

That charming and bright place by the sea, with its light and beautiful cottages, surrounded by gardens, remind one of the most picturesque scenes of Switzerland. It has also all the poetry of

tropical places and is most accessible. Excepting during the Seashore season when the houses are all taken and there is no room at the hotel, any one without incurring in large expenses can visit this pretty corner. And the place is well frequented.

The other sea-shore places are not less interesting, and for all of them are rapid and easy transportation facilities. To go to S. Vicente, that pleasant city, there is a railway service. It is located



Campinas. - Railway Station

at one hour ride from Santos and has a beautiful stone monument to commemorate the discovery of Brazil.

Santos is connected with S. Paulo by a powerful railway, which had to overtake the difference of 700 metres over the Cubatão hill in a series of five inclined plans, each of them filled with works of art, tunnels and viaducts. It was a marvellous feat of modern engineering and it was the initiative of Visconde de Maná.

When the train starts from the bottom of the hill, our first thought is that the monster cannot go up that steep hill, which rises with all its majestic proportions filled with abysses of threatening

SANTOS. — CELEBRATED WATERING PLACE OF GUARUJA

vegetation. But the train goes on, advances with a group of ears, the landscapes run away from us, there are endless banana plantations like rough lakes by the side of the train until the first station. Then begins the Uphill work until the third stop. Then there is the fourth and the fifth until the top where from through a level road the train takes us to S. Paulo. It is a pretty scenery all along the road with houses, churches, plantations, factory chimneys, monuments, woods, bridges over a river, all that variety of landscape that charms the eye of the traveller without tiring his brain.

Campinas. - It was once the most important city of S. Paulo, that beautiful city of Campinas, and it still keeps one of the first places in the State. It was formerly called S. Carlos, and took the present name after the green fields that surround it. It was elevated to the rank of city in 1842. It is the seat of a most rich coffee district. According to census of twelve years ago there were 33.900 inhabitants, to-day there must be 45,000 or more. A railway line connects it with the Capital of the State. It has a learned and cultured population, with several institutes of instruction. Its wide streets carefully swept, with magnificent gas illumination, are lined with palaces and fine mansions. A Brazilian writer wrote about it as follows: «But what is to be admired most there is the neatness of the streets. and even in the residences there is to be noted good hygienic conditions and cleanliness. The yards are eemented, they can be easily swept and washed, thus avoiding dirt and infiltrations, with all its bad consequences.

With that sky of a perpetual blue, and a complete silence, the city has the aspect of a wealthy spot sheltering an opulent court. »

It is probably due to that aristocratic appearance that they call it *Princeza do Oeste* (Princess of the West) and must be a real princess the city that has the requirements to ennoble it that Campinas has. Were it not for S. Paulo, Campinas would be a splendid capital which would not lower its greatness. Excellent water, several newspapers, a nice Gymnasium, three libraries, tramway service, are all elements of progress to be formed in Campinas.

From among its best buildings we admired the S. Carlos theatre; the large vegetable market; the Companhia Paulista railway station, of norman style, with a square tower at the side, ending in a pyramid, the main body of which having two floors and side galleries; the City Hall, of simple but noble lines; the Nossa Senhora da Conceição church of Roman Style, imitating the Gloria Church in Rio, and one of the largest and richest churches in Brazil, in a public square with four rows of trees carefully treated; the Corrêa de Mello

School, another fine public building, of modern agriculture; the Slaughter house, one of the best of its kind in S. Paulo; the public garden and race track. These two are worth a visit of the tourists as well as the building of the Lyceum of Arts and Trades and that of the Italian Beneficent Society, large and of corinthian style with a central body and two wings.

AMPARO. — This is one of the most progressive cities in the country. It has 30.000 inhabitants with all modern improvements which can give name to a Capital. And this is the Capital, we may say it, of an opulent municipium.



Campinas. - Panoruma of a part of the City. 13 Maio e Costa Aguiar Street

The agriculture which is the principal element of life of this municipium consists in coffee. The export of this product in 1900 was of 23.351.603 kilograms and the import of goods in 1899 was 10.512.402 kilograms.

We were told in that city that its name — Amparo — (protection) came from an historical circumstance: several families quite poor, a certain day went to that place looking for protection and shelter that that rich and pretty spot could offer them. And there remained and prospered. It was a beautiful place. From the city on one side could be seen a ridge of mountains known as Caraquatá, rich and fertile as Brazilian mountains generally are, and on the

other side the waters, the river, that as Father Bazan said, are for the landscape what the eyes are for the face.

It is a new eity. In 1828 it was a simple hamlet. It became a city in 1865.

It is 135 kilometres away from S. Paulo. The hills surrounding it, all full of eultivation, are charming. Having progressed much in the last ten years it can present to the visitor some beautiful buildings, as for instance:

The parish-church, a structure preceded of four corinthian columns, ending in a front with a statue, two square towers and polygonal pyramids, a central door and three windows fill the front of the building, and in the towers are niches for statues.



Campinas. — Lyceum of Arts and Manufactures

The City Hall, a magnificent building has in its front rich columns, in the two floors and upon the aeroteria a little steeple with a clock and bells, symbolisms left by tradition to the municipalities.

The Amparo Hospital is one of the best we have seen. Two bodies of two stories each, connected by a central pavillion in form of portico, the entrance to which is made by a pretty stairway, all in the ionic style, is the exterior of the building; in the interior, as all modern hospitals, has wards amply aired, full of light and with complete hygienic and anti-sceptic conditions.

There is a large and pretty school in a two story building, with two distinct bodies, german style, with terraces and pavillions at the sides, forming all a beautiful whole. The João Caetano theatre, with a pretty front, two floors, is a small but artistic theatre with 600 seats capacity.

The electric light works, are in a solid building. They provide the motive power for the electric lights of the city.

The street that pleased us most was Treze de Maio, wide, with nice buildings, of Italian architecture, as well as business houses.



Campinas. — Church of N. D. da Conceição

The public garden is pretty and good care is taken of, with works of art, pavillions, etc.

The city is connected with the outside by means of the Mogyana railway.

PIRACICABA. — It is on a river, as it happens with the majority of Brazilian cities. This river is nice and clear, with falls, the inhabitants taking full advantage of them.

Its river is the motive power for the light and moving of Piraci-

caba factories. Thus is that an industrial city. Its topography is regular, the buildings are modern ones, it looks like a chessboard. Its public garden is very pretty. There is great animation and material progress in the city. It must have 35,000 inhabitants. Ten years ago when the last census was taken, it had 13,194 males and 12,071 females, not including the population of Santa Maria district, which really is not city.

It has pretty buildings both public and private, as:

The Coração de Jesus church, of Roman Style, in a large severe



Guaratinguetá. - View of a part of the City and port

body in two sections, with statues in the front. It has a classic and harmonious appearance.

The Methodist church, with its steeple in the form of a collossal sentry-box and surrounded by palm-trees.

The high school, new two story building, Italian style, with a fine garden and artistic railing in front.

The grammar school, a pretty building of a sober and harmonious architecture, gothic style; it is a proof of the care and generosity with which S. Paulo installs its institutes for instruction.

Piracicaba has some notable factories, moved by steam and hydraulic power, threading mills, breweries, distilleries, etc. We eite a sugar factory, producing annually 90,000 bags of sugar of 60 kilos each. It is a large building with two chimneys. The « *Arethusina* »

is a cotton mill with all modern improvements with a valuable production both because of the quantity and quality.

GUARATINGUETA. — Those who travel between S. Paulo and Rio see at the kilometre n° 300 of that line, a gay city, the houses of which are reflected in the trembling crystal of the river waters. There is a long red bridge over this river. This city is Guaratinguetá, built in 1641 though it only became in fact a city in 1844, two centuries afterwards.

To-day it is a most active commercial city as well as an industrial and agricultural one, with excellent public buildings and private houses.



S. João da Boa vista, - Place of recreation

It could not be otherwise considering the magnificent location where it is between two commercial emporiums, the two largest markets of Brazil — Rio and S. Paulo — and connected with both by railway.

It has a beautiful climate at a height of 530 metres above the sea level, wrapped in extensive coffee plantations, another green sea, which grows larger every year around the city.

Among its principal streets is Quinze de Novembro, wide, a little curve, with nice private houses and commercial stores.

Its City Hall is not worthy of note; it is a solid two story structure, with seven windows in the upper story and three in the lower one, and has a somewhat decorated front.

The church, the high tower of which can be seen from the train is one of the finest churches in the interior. Its market is a lively one and kept clean. The streets are wide and well illuminated. The movement and animation of the people, everything there gives the city the right to be called one of the first cities of S. Paulo.

Its population grew rapidly. By the statistics of 10 years ago it had 30,000 inhabitants, to-day it has no less than 45,000, of course, in all the municipium.

Sorocaba. — S. Paulo having several cities purely industrial ones, hardly will be able to present another like Sorocaba, excepting the Capital. Of its 30.000 inhabitants at least one tenth or about 3000 devote themselves to the factory work. Located in a large hole in the soil it takes advantage of its river, full of falls, known as « the river that digs holes » and uses it as motive power for the factories, cotton mills, etc.

Its public garden is the most picturesque in the whole State. It has in the centre a pavillion or band-stand, country style but quite pretty. Its church has also a countrylike aspect, old architecture, quite simple. We are not sure but we think it dates back the time Sorocaba was a village in 1600.

Its streets somewhat tortuous, as those of all the old eities, are lined with nice private buildings and stores.

Dr. Moreira Pinto twoy ears ago wrote about this city as follows:

« Soroeaba is to-day transformed into an industrial city, business there now is taking a new turn, new houses built in large numbers show a live awaking.

It has four threading mills, leather tanning works, brick factory, hats, shoes, and other factories, and these are the best proofs of the new economical feature of the municipium.

Besides the lime manufacture which is done in large scale, and preparation of marble at Dr. Nicoláo Vergueio's farm, there is the culture of vines and making of wine, the latter finding easy market.

Yet, the business of Sorocaba preserves a more vast field than that of the boundary lines of the municipium. All that immense region at South-east of the State of S. Paulo until the frontiers of the Paraná State gets its supply from Sorocaba that is undeniably the most important market on this side of S. Paulo.»

It has a Charity hospital, a fine public theatre, newspapers, masonic lodges, the Sorocaba railway, water supply, electrical illumination, etc.

It produces coffee in great abundance, it exports eattle, sugar, lime, etc. It produces grain for the consumption of the whole munici-

pium and even exports a little to the neighborhood. This district is no doubt rich in minerals and there is the Ipanema iron foundry, producing iron of a quality superior to that of the best foreign mines. Before the discovery of this important layer which feeds that factory, several exploitations of gold and silver had been made in the Aracoyaba hill. The iron foundry is situated very near this city, being connected with it by the Sorocaba railway which has a local station there.

Pindamonhangaba. — When a long name like that is given in Brazil, what is not uncommon, people generally say: — « the name is larger than the person ». In this case we cannot say that the name is larger than the city. Large as the name is, the city exceeds it, progressing with a speed that honors the S. Paulo State. It is also by the Central Railway of Brazil road, 170 kilometres from the Capital of the State. Just like Guaratinguetá it is built on the banks of the Parahyba river. It has an excellent climate, 540 metres above the sea level, on an elevated ground opening the horizon of ridges of mountains.

Its population is, perhaps about 25,000 inhabitants. The census of 1892 gave it 17.542 of which 8.744 males and 8.798 females. It was made a city by provincial law n° 17, the 3rd of April 1849. Its principal products are: coffee, rice, beans, corn, sugar, brandy, hides and cattle. It comprises the Nossa Senhora do Bom Successo de Pindamonhongaba church. Its Sete de Setembro street is pretty, though somewhat inclined, with a fine perspective with one and more floors. The Francisco Romeiro public square is most beautiful.

LORENA. — This city, as the previous one, is bathed by the waters of the Parahyba river, and in the 280th. kilometre of the Central of Brazil railway, not far, then, from Guaratinguetá. From there starts the small railway now in construction to Campos do Jordão, where the War office built a military Sanatarium.

Lorena has a charming panorama, has newspapers and good illumination. Its parish-church is pretty, middle age Italian style, with a high steeple and surrounded by palm trees.

A building that awakes the attention of the *tourist* is the jail and police barracks, with wide lines Italian style without losing anything of its austerity and solidity.

The school, however, has not the architectonic beauty of those of other cities of S. Paulo. It is a large building like a plain storage house, in the style of the houses in the old metropolis square and windows on all sides. A fine building in Lucena is its sugar factory,

two stories high, and in the main structure has a square chimney.

Janú. — By the Estrada Paulista railway at 12 hours ride from S. Paulo, there is Jahú. It is the seat of a coffee municipium, a great producer. Its City Hall is a square building with two floors, simple but elegant, with a stairway in its front, decorated with ionic style columns. Its market is pretty, but of quite a different type from other markets we see in the interior eities. It was built with stone and lime but of an architecture quite presentable.



Jahú. — Municipal Chamber

One of its newspapers the Correio de Jahu, not long ago affirmed that that municipium is of all others of the State, the one where more work has been done for the cause of public instruction.

Not long ago it had only two schools, one for each sex, and now besides private colleges it has 33 schools with 1.021 pupils.

Jahú has ten schools united in a group called « Dr. Padua Salles », four isolated, maintained by the government, 13 maintained by the municipality, a night school maintained by the government, an Italian school directed by professor Diaferia, a church school maintained by the vicar, another night school installed in the mason lodge building, one maintained by the Presbyterian church, one just

founded, — « the Maternal » — for little girls from two to five years old.

There is a good school for boys under the denomination of «Atheneu Jahuense», of which Dr. Domingos Magalhães is the director; another one under the direction of Dr. Gabriel Pupo; and another one for girls directed by the Sisters of Charity of S. Joseph's church.

Public instruction alone costs to the municipality 45.000\$000.



Taubaté. - The Cathedral

Araraquara. — Pretty City, 640 metres above the sea level. It was progressing very rapidly, when a few years ago, the yellow fever visited it in spite of its height and temperature. The population of that region got frightened and Araraquara lost a good deal thereby. It is at a 10 hour railway ride from S. Paulo. It is below the Piraeieaba river and near a high ridge of mountains full of vegetation in the 401 st. kilometre of the Santos railway.

It has a public garden, which is charming and is the pride of the inhabitants of that city, with artistic arborisation, full of small little avenues with benches, and a metal pavillion or music-stand.

The Matriz church is somewhat modest, notwithstanding it does not look bad: it is composed of a sole structure, with a nice front, in the centre of which is a large clock. Elevating itself on the front a little on the inside, there is a square steeple ending in a pyramid.

The city of Araraquara is at the North-west of the Capital. It comprises the S. Bento de Araraquara and Boa Esperanea parishes. Its inhabitants devote themselves to the cultivation of coffee, sugarcane, cattle raising, as well as pigs, horses and sheep which is exported. Its population, city and municipium, is of 34,320 inhabitants.

Rio Claro. — As its name indicates, Rio Claro is on the banks of a clear and picturesque river, which geographically has the same name of Rio Claro. It is a new city.

S. Paulo has them in large number, and besides it makes old eities become new. This is a city of 20.000 inhabitants. Its streets are straight and wide — a model. Its public squares are embellished by palm and other trees. It has a splendid temperature and fresh at its 620 metres above sea level.

It is a city truly Brazilian, as it was founded after the political independence of Brazil.

It has splendid private and public buildings, factories, schools, colleges, newspapers and others. A newspaper man writing about Rio Claro, as a foreigner, noted at once this circumstance — the difference between the cities built by Brazilians and those inherited from Portuguese colonial times.

This newspaper man said: « Cities like Rio Claro are beautiful, because in these interior cities that are all built by Brazilians, the creation is more perfect. Rio Claro, is a small city of the S. Paulo State, a new one, with but few inhabitants, and it was born already with a perfectly modern plant: The streets by numbers, like those of American cities, and illuminated by electricity, and this was done in six years! »

This speed in construction, seems to be a secret of the inhabitants of S. Paulo.

Rio Claro develops day by day, thanks to its active commerce, the fertility of its soil, and the good habits of activity and work of its citizens.

Besides all that it has the advantage of not being far from the Capital, only 180 kilometres. It has two railways: the Paulista and Rio Clarense railways.

TAUBATÉ. — This is one of the largest cities of S. Paulo, only 150 kilometres from its Capital. It is located between a little river ealled *Correio* and the left bank of the Parahyba, the triumphal river that bathes a good number of the best cities of the State.

This name of Taubaté, so they say, comes from the indian names taba, which means, (hamlet), and ité, which means (low). Others are of opinion that it comes from Taybaté or Itaboaté....

At the North of this pretty city there is the rough inclination of the Mantiqueira, the tops of which can be seen from many miles away. Its population is of 30.000 inhabitants, and comprises the S. Francisco das Chagas de Taubaté parish and surroundings.

It has gas illumination, tramways, newspapers, hotels, clubs, etc. Its streets are in general wide [and straight, and there are 37 of



Taubaté. - Coqueiros street

them. It also has 12 public squares and several lanes. It has about 2.500 houses, most of them only with the ground floor, but nice looking, several churches, schools, oil factories, threading mills, gas works, etc. This is Taubaté a well known city.

The most important of the Churches is the *Matriz* a large building, simple but sober, with two towers alike.

It has excellent water, coming through pipes from the Mantiqueira springs to supply the population. It passes under the Parahyba river bed.

Besides the tramway service in the city, by animal traction, there is also a steam line connecting the city of Taubaté with the poetical suburb — Tremembé, a little village of some 1.000 inhabitants.

IGUAPE. — We visited this city in May of 1903. It is located at the point of the sea-arm between the continent and the narrow sea-island, which is in front of it quite flat and dressed with humble vegetation. When we enter the port, and we look to the city, it seems smaller, much smaller than it really is.

This is the Emporium of the S. Paulo rice exports, a most modest emporium, indeed. As a city, Iguape, has nothing worth noting. It is a quiet group of houses of old style construction, above the roofs of which majestically rise the two towers of the Bom Jesus church, where they hold a popular festival every year, with the assistance of all that multitude of people from the neighborhood that come there to join the city crowds. They have then a real fine time.

Outside of those festivals the city is a quiet one, only awaken into activity with the arrivals of Lloyd steamers going there to load rice.

In the port, so shaded and calm we saw several small steamers for the fluvial navigation.

Cananéa. — At the South of Iguape is another small city also a port where the Lloyd steamers call at, it is Cananéa. It is built on a ravine a little above water. It has a few dozen of houses with dark, old roofs, some falling, quite abandoned. We go up to the city by quite a steep road, which leads to the public square where is the church — a modest church with only a tower at one side, all white. In front of it is a fountain, rose color, of simple architecture, and square in form. Some boats and canoes, do the port work, the bar of which, a little ahead of the Bom Abrigo island is an awful one, with a long reef.

Among the other cities of this State we cannot help mentioning: Pirassununga; Ribeirão Preto, which has very much progressed; S. Carlos do Pinhal; S. José do Rio Pardo, seat of a very rich municipium; Batataes; Bragança; Descalvado; Botucatú; Itu and several others. We must, however, maintain ourselves within the plan of the book. These references and descriptions would go very far, should we speak about every one of the cities. We will close this chapter right here.



S. JOSÉ DO RIO PARDO

THE STATE OF PARANA

That splendid region south of the S. Paulo State, from which jurisdiction it was detached in 1853 to form a new province, is perhaps the most beautiful spot in the South of Brazil, if not in the whole of South America. It was discovered and conquered by the Carijós Indian tribes in 1614.

They used to call it Pará-nã, or Maranã (that looks like the sea), and the Brazilians called it then Paraná.

Romario Martins in its « Historia do Paraná » wrote:

« By that time the place of S. Vicente which was made village by Martim Affonso was already beginning to flourish.



Dr. Vicente Machado. — Governor of Paraná

Its inhabitants hungry for imaginary sources of riches, moved around, everywhere looking for those inexhaustible mines of precious metals.

Encouraged, then, by the number and by the ideal of wealth, erowds of Portnguese decided to go to sea, in a southward direction, following the coast-shores of Ararapira and Superaguy, and after a little work they succeeded in going through the bar of Paranaguá, in front of the beautiful panorama which made them stop in cestacy. »

Of our sea-eoast States, Paraná, is, after Piauhy, the one that has the smallest extension of coast, with only two ports: the bay of Paranaguá, — the largest of all the southern bays — and that of Guaratuba, a small bay, as yet without any commercial importance. But its river fronts are enormous. We can say that its territory was indicated by the long courses of those streams called Paraná, Paranapanema and Iguassú, which give it the morphology of a true



Pine-tree, araucaria brasiliensis

island. It would be so if its population did not vindicate, in a dispute, which is already a long time being discussed, the extensive fields north of Santa Catharina State, till the thick ridge of mountains named Fortuna which runs like an axle parallel to the Iguassú.

Dr. Vineente Machado is the present governor of Paraná, one of the most liberal minded politicians and one of the most patriotic Brazilians of the present generation. A patriot, not in the vain sense of declamations, but in a practical manner, as he occupies himself a good deal with material progress, public order, public instruction, and very little or nothing with election disputes and other political trifles. In a short period of public life, he has already rendered great services to Brazil, giving impulse to the progress of Paraná's civilisation. Curityba owes to him its last improvements, as the water works, sewerages, pavements, etc. In the interior he has helped commerce, colonisation, the local industries, public instruction which are receiving the visible benefit of his good politics of work and action, that he has exercised in his post of political chief in the Paraná State.

A small part of the territory of Paraná is full of villages and cities, here and there, in a region, lying between the sea-shore and the Paraná-piaeaba ridge of mountains, and in the South between the Iguassú and the Esperança and the Cavernoso mountains. The large remaining area, which represents four fifths of the surface of the State of Paraná, is still almost unexploited.

The PINE TREE. - The aspect and mild climate of Paraná, sometimes cold, going uphill, make of that part of Brazil a privileged mansion. Its long and green fields are the sweetest faney of Ameriean nature. Saint-Hilaire used to say that: «they were Brazil's paradise. » What, however gives to Parana an unmistakable charaeteristic are its pine-tree woods. These are the first curious thing of Paraná. The pine-tree, arancaria brasiliensis is the pride of the fields in Southern Brazil. It is the seal of its flora sovereignity over the other regions of the continent. It is the prettiest and most useful of the coniferous and after the palm-tree is the most suggestive specimen of ornamentation of all the flora individuals in South America. It is a fruit-tree, it is an architectural column, it is first elass fuel, it produces most useful rosin, it is the most beautiful shade-maker in the vast plains it dominates, and it is above all a pleasure to the observing traveller, never mind how little of the poet and artist there may be in his soul.

It participates of the intertropical and northern phytology characters, it is a European and American tree at one and the same time. Botanist did well in ealling it brasiliensis; the tree, as the Brazilian people, is from America, yet they are from Europe. There is no figure which will attract more the traveller's eye, than the original profile of an araucaria, remembering one of those favorite motives called art nouveau (new art). Just imagine a tall and vertical piece of lumber as if it were a column worked by the most minucious artists. It rises from the ground naked, in the fields to a height of 25 or 30 metres where it supports a series of branches also

naked like the collossal stem, spreaded out, a little curved upwards, to the contrary of the European pine-tree, and ending in globes of dark green erispy leaves. It looks like a candelabrum, sometimes the stem divides itself into two and looks like two candelabrums, upon the same trunk. These are in small number. The other kind is the common type and is found sometimes isolated, sometimes in groups, and sometimes in regular forests of groups.



Rocks of red stone of villa Velha

Another euriosity of Paraná are the sambaquys, enormous ostreiras of which there are only 71 in the Antonina municipium. They have the form of hills representing the work of many generations, as the kjkknmoddings from Denmark, they mark and illuminate the history of a prehistoric race in South America.

In regard to those material documents of first life in Brazil, Dr. Ermelindo Leão a native of Paraná, wrote:

"The vestiges of human existence that we note in them, just as skeletons and pieces of vases, goods of polished stone, etc., make us believe that they were accumulated in the fishery season by the aborigines, in a long series of years.

And thus we explain having now found rough objects of splintered stones, then articles of polished ones, more perfect, by and by, craniums of ferocious aspect, later yet others much less accentuated as to the facial-cranium morphology attributing them to generations left behind. »

Industry has destroyed mercilessly those monuments of Brazilian paleonthology, which were not as lucky as those of the Lagoa Santa, (Saint Lake). They are waiting for investigators be it a Lund, be it a Brazilian, a lover of his past. The *sambaquys* give an excellent lime, and that is all we know as yet.

A third curiosity of the Paraná region, is the Villa Velha (old village), which becomes popular through photographs and engravings.

What is after all that Villa Velha?

The Villa Velha is a series of monoliths, or rather, an extensive series of rocks, reddishlike, named by the geologists as old red sandstone, of vulgar formation in some grounds, having over a kilometre of depth. As time and water destroyed the carsiable part of the quarry, opening streets and regular squares, and the parts that remained standing at certain distance look like houses, walls, constructions in ruin. The low bushes covering the squares and enveloping somewhat the lower part of the quarry, give it the configuration of an abandoned city. In some places the stratifications rise to a height of over 100 metres, imitating towers and eastles. Each street and each square of those ruins has its name, or rather nicknames given by the people, who frequently visit that curious geological formation some 30 kilometres away from the the Ponta Grossa Station.

Last but not the least, there is still another curiosity, the Sete Quedas cascades formed by the Paraná river, near the place where used to be a celebrated *Provincia de Guayra*, of the Spanish monks. According to this they also call this colossal water fall—Sallo de Guayra (Guayra jump). The Paraná river, becoming thicker with the Rio Grande and Paranahyba rivers meets with a spine of the Maracaju ridge of mountains, some 500 metres of rocks upon which the whole river narrowing itself suddenly throws itself, with a noise that can be heard some two leagues away. From the bottom where the waters fall, forming seven cataracts, an enormous cloud rises.

These great falls, which we believe to be the largest of the whole continent, having no small number of them, can only be compared with those known by the name of Paulo Affonso in the S. Francisco river, about which we wrote several chapters above.

Unfortunately the trip to the Salto das sete Quedas, (seven falls jump), is, and will be for some time to eome a painful and difficult one. This fact prevents the tourists and scientists, from enjoying that deeply emotional pleasure, which is largely increased by the fact of there being near the falls, the ruins of some theological temples devoted to the conversion of the Indians, known as «reducções», and destroyed, like the Guayra Province, by the bandeirantes, (those earrying the flag), in 1631, the ruins of which can be seen there, in the desolation of dead cities.



The devil's peak tunnel in Cordilhera do Mar. - Paraná Railway

The trip from Rio de Janeiro to Paraná must be made by sea. The coast steamers make it in 24 hours, if it is a direct trip, or two to three days if they eall at the intermediary ports, according to the delay in the port of Santos and the small eities of Iguape and Cananéa. Be as it may it is a delightful trip made terre-à-terre.

The entrance of Paranagua bay is most charming. Three bars formed by the interposition of the Mcl, (Honey), and Peças, (Guns), islands give access to the calm anchorage place, amply illuminated by a cloudless sky. This port is to-day the vestibule of Paraná State. Those who wish to admire its Capital, the pretty

Curityba, must begin there, first visiting the port and the old Paranaguá city.

* *

A CELEBRATED RAILROAD. — On the 18th of May 1903, a pretty bad day, one of these grayish afternoons, with a ceaseless small rain and cold temperature, we took the 1.30 p. m. train starting from Paranagua to the Capital of the State. The Estrada de Ferro do Paraná, (Paraná Railway), which has there a quite poor station, is one of those things that the traveller congratulates himself on coming across with in his travels.

It is the work of Brazilian engineering which conceived, planned and built it through those convex mountains till the top where Curityba is.

On that rainy afternoon, the landscape, all wrapped in a sheet of elouds, every moment duller since the time we left Paranagua, could not be observed as it ought to be, so that I dindn't notice but uninterrupted succession of works of art that are there in abundance to be admired, especially in the second plan of the road, from Morretes to Piraquara.

From Morretes on begin to appear, sometimes isolated in the majesty of their profile, sometimes in dominating groups, the specimens of that variety of pine-trees, which are, because of their ornamental power and industrial utility one of the signs of the infinite kindness of God towards the Paraná soil.

Starting from Morretes to the place where the road has a branch line, we can only see a stretch of little houses here and there, old churches, somewhat indistinct because of the weather and the distance.

A little before we had seen Alexandra, formerly an Italians and Brazilians colony, to-day an industrious and growing village, by the railway as a nest on the branches of the trees.

The train goes on. Porto de Cima that a little while before was to be seen on the level with the road, is now below, and by and by disappears behind a ravine.

Thus we see now and again the same place, as that bright easeade, the Véo de Noiva, (bride's veil), which, the first time we discover far away up, like a thin vein, a stony tear, and half an hour later, after 50 turns through tunnels and viaduets, we see it near the train with all the noisy greatness of its fall, which beats the massive dark quartz masearaded by surrounding vegetation.

Oh! but that nasty little rain..... How it spoils the gladness of these panoramas!

The train keeps on its speedy march, going through and over narrow edges, deep holes, mountain after mountain, the locomotive crossing all this through many tunnels and viaducts quite near one another. An unexpected river with foaming waters now on the right, the on the left of the track, appears and disappears, as a caprice, asf a defiance to the road whose bridges wrap it a boa constrictor snake—and overcome it going ahead.



Curityba. — Parana railway Station.

Sometimes the mountain opens itself into an abyss, or two separate hills, in front of one another, open a solution of continuity in then tortuous and inclined road, which the track describes, for many kilometres, when it comes across with one of those mammoth opening, a bridge connecting the two hills, one of those bridges that look phantastic and that the dreadful genius of metallurgy devised and learnt how to put up, and upon it the train goes calm, strong and firm over the danger.

One of these crazy fancies is the S. João bridge, a hard steel web thrown from a hill to the other on pillars 40 to 50 metres high.

Another one is the Carvalho viaduct, (Carvalho being the name

of the Brazilian engineer who built it), painted red. It is a kind of verandah tied to the mountain side surrounding it in its eurves, and leaning over the valleys which describe their eurves below. The dark and wet top of those trees of the vegetation is below those points more mysterious still in its inferior silence. In one of these precipices, in the 65th kilometre, we saw a simple but an expressive monument, a black iron cross, with an nscription that could't be read — and they told me that it was in that place that they murder-



Curityba. — Congress Chamber.

ed Barão do Cerro Azal and four companions, at the time of the last revolution.

It is near that place that is the Pico do Diabo, one of the hill tops, quite rough and the hardness of which had been perforated from side to side by one of the road tunnels. The panorama is exquisite. The rocks dominated the vegetation, but this attempts with energy to wrap them. It looks like a convulsive picture. Rocks and Abysses! All in a grandent that deadens our minds.

From kilometre 85 on, the multitude of arancarias increases. There they are standing firm, noble, melancholic and there also appear the saw mills which waged them a dreadful war. Some of

those saw mills, are establishments worthy of note, moved by steam and of quite large proportions.

After several bridges, viaduets and 14 tunnels, — a string of daring art works — we are at Piraquara station on the top. From there on we meet but plains, large ones with irregular vegetation, the beautiful pine-tree always predominating, as the Paraná diadem. Those plains prolong themselves till Curityba, where the train arrives in the evening already under the irradiation of the



Curityba. — The Governor's Palace

electric lights which announce the traveller that he is in the presence of a modern Capital.

This Estrada de Ferro do Parana Station, is a beautiful three floor building, painted yellow. It is as new as it is pretty.

CURITYBA. — Those who know political geography of Brazil must have noticed that nearly every Capital of State is by the sea, either at the entrance of a bay or at the mouth or on the banks of a river bathing its territory.

Three of the Capitals, are exception to this rule, and they are: S. Paulo, Bello Horizonte and Curityba, all of them being on high places that dominate the narrow band of the sea coast where are the eommercial ports. These three eapitals are between 800 and 900 metres above the sea level.

- S. Paulo and Curityba which, before Bello Horizonte was built, were the capitals with best aspect in the whole Brazil, presented, several points of analogy: Both of them have their organ of commercial-economic appropriation and expropriation, in the Atlantic coast, of which they are both separated by a chain of mountains which had to be overcome by railway. Both had to build their commercial vehicle realizing notable works of art to connect them with their ports.
- S. Paulo had its inclined plans installed to go up the Cubatão hills between Santos and the Capital; Curityba built its tunnel-bridge line to cross the Sea Mountain between Paranagua and Piraquara. Both are the most celebrated works of art in the construction of railways in all Brazil. The road from Paranagua to Curityba, however, is the most marvellous one, by its plan, its audacity in the viaduets it built, and by the novelty of the aspects of nature it envolves.

We will now speak of Curityba, proper, if you like. While this Paraná region was still only a district of the S. Paulo province, Leodoro Ebano Pereira founded a place at the foot of the Sea Mountain, giving it the name of Curityba. It did not take long for it to develop becoming a village in 1693.

The whole of the city is gay. The pure air of the pine-trees that wrap it, the wide and clear horizon, the plain displaying itself in all directions, the modern feature of the houses, the daring feat of several constructions, the alignment of the streets, all of these are details that form the festivallike and tender physiognomy of Curityba.

Considering the difference of relative size, this city is the S. Paulo of Paraná. With its hard working population, hospitable and clever, with its manufacturing activity, its intellectual cultivation, its contribution towards progress and corresponding horror to the routine processes — Curityba charms the visitor who remains with the impression that he is in a European city. And such an impression will never be forgotten by the traveller.

Right in front of the railway station is an avenue of a beautiful effect too which they call Liberty Street, where the State Congress building is, the Governor of the State building, several hotels, and important private houses. It is illuminated by electricity like the majority.

Curityba is a very modern city in its development. Only in 1863 it had but 25 streets, 282 houses (inhabitable), and about 100 in

construction and of those only 22 had upper stories. To-day Curityba has 156 streets, four beautiful and large public squares, nine smaller ones, four boulevards, not counting streets spreading themselves to the suburbs increasing the expansion of the future nucleus.

Te streets of to-day are wide, lined with houses on both sides and in all its length, there being but few empty lots among them.



Curityba. — José Bonifacis street.

Many are straight, all of them plain, as the city is on an esplanade, the celebrated fields of Curityba. Among the principal streets we can cite Quinze de Novembro (the date of the proclamation of the Republic, there being a street with this name in nearly every city of Brazil). This Quinze de Novembro street in Curityba is like its spine, it is extensive, straight, with large business houses, newspapers offices, Post Office Department, Federal Telegraph, candy stores,

bar-rooms, etc. The movement and transit in this street, which do not cease till very late, fill the great artery of Curityba, lending to it a seducing feature.

No man in Curityba has finished his days work if he has not had his quarter of an hour rendez-vous, to which the elegant part of the population, the business men, the politicians and literary men are used to. A peculiar thing, however, there is not in this street, neither in the whole city, a coffee house, (one of those bar-rooms making the speciality of serving cups of coffee, to be seen in every corner and in every city or village of Brazil).

Those dreadful centres of conspirations of all nature,—those coffee houses—the Brazilian rendez-vous places, where reputations are made, unpopularities decreed, where criticism of all sorts is made, where they speak of science, art, business, are a regular pass-time which gives great life to Brazilian cities, but there is not one of them in Curityba. We find them, however, in Florianapolis a city much more inferior to Curityba in development and importance, and in Rio Grande, Pelotas, Porto Alegre, cities which are farther away than Curityba to partake of the habits of Rio and the other northern cities of Brazil.

Instead of those coffee houses, there are clubs and the lack of the former explains the frequency we always noted in the clubrooms, in Curityba. We visited every one of them, and there is a good number of them. We were especially much pleased with the Curitybano club, with wide and well appointed rooms, a splendid library with 10.000 volumes. This is the oldest of the city, and the Casino Club, as important as the Curitybano and also having a good library. All of them give monthly parties in which the leading families of the city take part and the brightness of which we can well imagine when we know that the fair sex of Paraná are of the prettiest in all Brazil, thanks to the superior transfusion of European blood (German, Italian and Polish) that in strong proportion has collaborated in the formation of the populations south of S. Paulo and Minas Geraes.

Curityba, more than any other Brazilian capital, presents the ethnic traits of the type of Brazil's future population: the whites, somewhat fair, with vertical lines, well formed, give life to the squares and commercial streets with the activity characteristic of the race.

A splendid factor of work in Parana and consequently of the progress of its cities, are those German and Polish elements, collaborating towards a sound spirit of work and order, the evolu-

tion of the colonies, the industry and business. In Curityba, especially, a large portion of the business houses belong to Germans, and in the signs are getting searce the *Almeidas*, the *Silvas* and the *Fernandes* (Portuguese names), to give place to the Meyers, the Hauers, the Stahls, the Müllers, the Meissners, the Weisses, and other German ones.

He would be quite mistaken the one supposing that such signs belong to foreign houses. Nearly all of them belong to natives of Brazil, sons or grand-children of Germans, Poles and Italians, the



Curityba. - Offices of the firm José Hauer & Bross

Germans more especially fixing their residence in the country. In Curityba, in Ponta Grossa, in Paranagua, the best business houses belong to descendants of Germans. It is enough to eite the house J. Hauer & Sons, a very well known firm whose commercial house is a monument for Curityba. But this is not the only one. The match factory of Eisenbaen & Hurliman, one of the most important in South America, only in one year paid 1.000:000\$000 of taxes. There are many others.

Another peculiar aspect of Curityba is its unusual transit of cars and trucks. As the city is surrounded by hard working colonies,

every morning the farm-workmen eome down to the city to bring their products: they bring milk, eleese, butter, vegetables, fruit, and other products. A multitude of wagons and heavy trucks with canvass eovers, filled with goods, Brazilian tea (matte), or trunks of pine, come to the Capital. Some go to the railway station, some go



Curityba. — The Catholic Cathedral

from street to street, sometimes driven by country girls who take charge of their business. Though the types and customs are yet at the bottom entirely Brazilian, we note certain traits of difference between this and the northern cities. The servant, the truckman, the groeer, etc., are not Portuguese from the continent or from the Portuguese islands, as in Pará, Santos or Rio, but Italians or Poles.

Curityba of to-day is developing unceasingly.

Among its best buildings we noted: the Cathedral, of a rigorous gothic style, a reproduction of the Barcelone cathedral, built by the architect August Wenneck and inaugurated on the 7th of September, 1893.

In front of that church is one of the most beautiful Curityba squares, — the Praça Tiradentes, — where they recently erected a statue of the late president Floriano.

In that square was formerly a jail, to-day it is a public square. Just where there used to be the ignominious pillory of the kings justice, in olden times, to-day ondulates the beautiful vegetation of the tree tops, and the perfume of the roses invites one to



Curityba. — Charity Hospital

dream. He was right the prophet when he said: « When perfection arrives, imperfection ceases ». — Cum autem venerit quod perfectum etc. etc.

Another public place which is very pleasant is the public garden, built in a place where the small river Belém, makes capricious but interesting curves. The painter of landscapes sketching that sweet type of garden, had no other art but to follow the local natural one, only using the details. The river that passed there had not to be bothered in its course, but was decorated and embellished by light bridges, and other fancies of the landscaping architecture. The public garden, has some 50.000 square metres, and is one of the prettiest in Southern cities, though, it is a little abandoned when I visited it.

But, going back to the noted buildings of the city we have :

The Hospital de Caridade, an identical institution to the other eity hospitals of the Brazilian capitals, it shelters and cures the poor siek without distinction as to where they come from. It is a large and beautiful building, the white structure of which is seen from many places in the city, because, while it was built at a distance, to-day the buildings have wrapped it, and that which was but a suburb of Curityba, to-day is its centre. It was founded by Silva Mauriey, a native of Paraná, and inaugurated by the emperor Pedro II, in May 1880.



Curityba. - Presbyterian Church

The Presbyterian church, in Matto Grosso street, is of a beautiful effect with its front of scotch gothic style, grave and austere as a melody of reform. The front of the building looks to a pretty little garden, protected by the classical and decorated iron railing.

The Telegraph Station of the Federal Government is another pretty building in the Rua Quinze. It has three floors, and looks to that street.

The Barracks of the 6th regiment artillery, large and solid, with an imposing and artistic front looking to Praça da Republica, and is of middle age style. The Orphan Asylum, large and of a nice architecture, it was built by public subscription, and efforts of its founder, Senator, Monsenhor Alberto Gonçalves, whom the Municipality aided considerably in his philantropic work. Senator Alberto Gonçalves is a prelate of the Brazilian Catholic Church, highly esteemed in Rio where he has been vice-president of the Federal Senate and beloved by his fellow-men in his State who elected him to the Senate, and in fact he would be to-day the Governor of his State had he not declined that honor.



Curityba. - Police barracks

The barraeks of the State troops, inaugurated in 1898, is a large building in S. José Street, at one side of the city. The main front is decorated and is somewhat majestic. The interior is perfect, every department shows exemplary discipline and zeal. In the stables we saw some fine types of Paraná horses, which do not seem in anything inferior to those imported from the River Plate. This is a good example to the northern States that neglect horse breeding.

The State Congress has also a fine building, new and noble in its lines, Italian style, with a poetical little garden around. A stairway separated from the street with railing of artistic iron, leads to the entrance of the building open in arches supported by columns of the

eorinthian order. The building is painted on the outside and inside of gris-perle, color, which brings it out in prominence from the green color of the surrounding garden. In a word, it is pleasant to the eye, without being in disharmony with the severe composition of a building destined to its object. It was inaugurated in 1896.

The Government palace also in the Liberty avenue, a little further ahead than the Congress building, but on the other side, is not large. It is even smaller than that of Santa Catharina, but it is in entire harmony with the official installations of its whole. It has a sober aspect, a superb front, and inside is decorated with all care and good taste.



Curityba. — Barracks of the 13th cavalry regiment

A characteristic of the official installation in Paraná, is o that in its buildings there is nothing to criticise. They do not represent exaggerated expenses, but on the other hand they do not show meanness, or neglect of official demeanour. They are in perfect accord with the importance of the Capital and its public treasury, neither more nor less.

The Guahyra theatre is another important building. It was already there before the last progressive impulses the State has received, but in 1900 was entirely rebuilt, giving it the feature it has now, with a beautiful two floor front.

The Seminary is a large building ereeted by the Catholie Bishop of that Diocese in a district of the city known as Batel, with a tramway line running to that place. This district has fine private houses, buildings of varied styles, beautiful farms and a brewery, on the terrace of which families meet who go there for a walk, to listen to some music and drink beer.

There are several churches, many business houses, private residences, which would be worth mentioning here but the fear of making this chapter too long compels us to go ahead, treating of other subjects.

* *

Social Culture, Public Instruction etc. — It would be difficult to find in a city of the size of Curityba such an active centre of



Carityba. - Asylum of N. D. da Luz for funatics and the poor

intellectualities and men of fine culture as it is to be found there. The city by the general census of the country in 1900 had 49.755 inhabitants, adding the populations of Nova Polonia and Taboão (2.998 and 3.509 respectively) Curityba presents a total of about 55.000 inhabitants.

The increase of population has been thus:

Years						Inhabitants 2.949
1780.						
1873.						11.730
1890.			٠			24.553
1900.						49.755

In that lot of 50.000 inhabitants we find scientists, writers, poets, journalists, who make Curityba a noted intellectual centre: Candido Abreu, the geagrapher; Sebastião Paraná, the corographer; Romario Martin, the untired polygrapher, director of the museum; Nestor

Victor, the novel writer and poet; Emilio de Menezes, the satirical poet; Alfredo Coelho; Ismael Martins; Rocha Pombo, the historian; Domingos Nascimento; Leoneio Corrêa; Armando Paiva; Ricardo Lemos, E. Pernetta; Dario Vellozo; Silveira Netto, Julio Pernetta; Nestor Castro; Pereira da Silva; Ricardo Lemos; J. Moraes; Euclides Bandeira; Carvalho Aranha; Theodoro Rodrigues; Marianna Coelho; Revocata de Mello; Julieta Monteiro; and a dozen more, are names that produce echo outside, proving the mental and literary activity of Curityba. Many of them found the place too small for them and went to Rio and S. Paulo, carrying with them the superiority of the fame of the Paraná State, that precious piece of the country. The local administration supports many institutes of public instruction like;

The Paranaense Museum, one of the best in Brazil, though it has not as yet an adequate installation as those of Rio, Belém and S. Paulo.

The Public library that we had the pleasure of seeing open to the public during the night, as those of Rio Grande do Sul and Rio de Janeiro.

The Fine Arts Conservatory with a modest Musical Institute annexed. We visited that beautiful establishment and congratulated its directors for what we saw. We find there young ladies with real artistic vocation. The institute is directed by a lady and is going to have a building of its own at the State's expense.

The Industry and Fine Arts College, for the study of liberal arts, was founded by private initiative of the professor Antonio Mariano de Lima, in 1890.

The Gyinnasium Paranaense, an institute of the same kind as the Rio one where the examinations are officially recognized.

The Normal College, the Theological Seminary, about 20 high schools, classes of many private associations, like the Historical Institute, the Archives, the clubs, with their libraries, etc. complete the organisation of the intellectual apparatus in Curityba.

There are several papers published in this Capital, nice papers and with quite a circulation. Among them are: O Republica, O Diario da Tarde, O Paraná etc. dailies. Among the weeklies and fortnightlies are: O Oilo de Dezembro, O Pernilongo, O Sapo, A Gazeta Polska, Jerusalem, O Esphynge, Der Beobachter, and several others.

As to elementary instruction Paraná is one of the most attentive and most generous States. It maintains 352 grammar schools for a population of 322.000 inhabitants. This gives it a prominent place at the head of the other States of Brazil.

Keeping the same proportion Minas ought to have 4.200 schools, S. Paulo 2.700, Bahia 2.700 and Pernambuco 2.600.

According to its population, we repeat, Paraná is the State that maintains the largest number of public schools.

* *

Going to another subject, the police force of the Parana State is composed of 454 men forming Regimento de Segurança (Safety regiment), whose barracks is the building we spoke of. It is commanded by a colonel of the Federal Army. They use Mauser rifles.

The city has good hotels, tramways by animal traction, and around the city a number of colonies, Italian, German, Brazilian and Polish ones. In one of these colonies, known as Villa Colombo, is among other factories, a porcelain and fine crockery one, the real artistic products of which we had opportunity to see.

The State of Paraná, is the one that has adopted the best colonisation system, on a rational basis, distributing the immigrants with equality by the regions of its territory where the colonies might grow and flourish, avoiding thus the mistake of the compact grouping of one simple nationality, as it happened in Santa Catharina, and, though in a smaller degree, in Rio Grande do Sul. In Paraná are 54 colonies, that, according to a magnificent topographic map drawn by Dr. Candido Abren, I notice are located among Brazilian population, near the railways or the rivers. Many of them are already villages or cities. We don't include the military colonies the expenses of which are covered by the Federal Government.

To facilitate communications among them and its markets, Paraná has railways, fluvial navigation on the interior rivers, and nice country roadways, the best in the country.

Among these roadways there are two that had a just reputation and are to-day in decadence hurt fatally by the locomotive: the Graeiosa one, which connected Curityba with the sea, the Matto Grosso one, between the Capital and Serrinha. The railway came and they were abandoned. It is the fatal history of evolution everywhere.

There are two railways running in Paraná: the Paranagua to Ponta Grossa one, with 417 kilometres, and the S. Paulo-Rio Grande between Porto União and Jaquariahyba, with 360 kilometres following the construction of the studied sections.

The interior navigation is effected on the Iguassu and Negro rivers,

by a large number of small steamers, from 100 to 200 tons, belonging to commercial firms and private citizens in Curityba.

* *

Industry, Production and Commerce. - Even as to industrial activity, Paraná, though one of the smallest of the Union, is one of the most advanced. We might even say that there is no branch of industry of those that are exploited to-day in Brazil, that is not represented in Paraná. Its principal industry is the preparation of Brazilian tea - matte - for export. Only in the municipium of Curityba alone there are 25 factories, modern ones moved by steam. These factories are called engenhos, the name that the farmers in the Northern States give to the factories where they make sugar in the sugar-cane plantations. The production of matte in these Curityba factories is 25,000,000 kilos. Annexed to this there are other industries, an accessory of it, like the making of barrels, printing offices, lithographies, etc. After this we have the saw-mills, some moved by steam, some hydraulic. The main bulk of lumber in these mills is pine, but they also handle embrya and other kinds of wood of Paraná. There are also wine, soap, shoes, cigars, matches, neekties, hosiery, ears, silk, trunk, crockery factories etc., etc.

Curityba alone has: 139 barrel factories, 83 shoe factories, 18 mechanic shops, 25 engenhos, Brazilian tea; 14 brick factories, 12 leather tanning works; 11 breweries, 5 cordial distilleries, 39 furniture factories, 9 printing offices, 1 lythographing place, 3 mass factories, 1 ice factory, 5 soda-water, 1 matches, 1 neckties, 2 trunks, 4 picture frames, 1 chocolate, 1 china pipes, 2 corsets, 1 hats, 3 harnesses, 1 paper boxes, 1 glassware, 1 aluminium articles, 2 playing eards, 2 tile factories. We do not mention small tin-smith works, coopers shops, iron-smiths, carpenters, etc.

What we see in Curityba as to variety and power of its industrial activity — which is the most positive manifestation of the social evolution in a certain region — we also see it in the other cities of that State, taking into consideration the respective proportions of each one.

But the principal merchandise which absorbs nearly all the productive energies of Paraná, is the *matte*, (Brazilian tea), and it is upon it that is based the strength of its maritime commerce. Due to *matte*, Paraná is in the list of the States that are exporters. It exports, in fact, much more than it imports, as Pará, S. Paulo, Amazonas and Bahia. In the list of the States that export the most,

Paraná is in the seventh place of those 18 exporting States.

Besides matte, Paraná exports to foreign countries and other Brazilian States, lumber, fruit, matches, etc. Its port Paranagua is the largest fruit exporter of the country to the River Plate.

When the Brazilian Republic was proclaimed the Budget of Parana was 826:000\$000 and to-day it is 4.000:000\$000, not including the municipal revenues. The exports from the State ten years ago, was 3.000:000\$000, but in 1901 it went up to 13.851:000\$000 and in



Paranaguá. - Da Praia Street and landing stage

1902 was over 16.000:000\$000 all proceeding from agricultural and industrial wealth.

Unfortunately, as to mineral wealth, in spite of marvellous things being said about the Paraná soil, nothing has been done to take advantage of it.

* *

OTHER CITIES OF PARANA. — Besides the Capital there are no other large cities in the State of Paraná. In this respect Paraná looks well like the Pará and Amazon States. Take Curityba away from Paraná and you will see how difficult it will be to find another capital. Let us see, however, the best cities:

PARANAGUA. —. The second city of the State, « is neat and elegant, its inhabitants are generous, sociable, and hospitable, expansive and hard workers. It is a city of commercial movement. Its municipium is very rich, and its soil produces with abundance the vegetables of that temperate region. » This was told us by an informant who is authority on the subject, and we found it all so on the 17th of March 1903, when we visited it for the first time. We have also to add something of what we saw. This old Paranaguá (derivated from paranaguá - bay, or sea bosom) is in the recess of a vast bay of calm aspect at the entrance of which we see a long low island, divided into two and covered with vegetation. In one of the sections is the light-house and in the inner side by the water is an old fortress about which a precious book gave us the following information: -« During the reign of D. José I, the famous chancellor Pombal, determined that the inhabitants should build the fortress at their own expenses. The poor fellows went to work to raise the money and built it, without saying a word, as such things were done at that time, that is, on the 19th of January 1767. Yet, in April 1769, when the fortress was finished the governor came there and ordered the following inscription to be engraved on the beautiful stone walls, taking away from the people any co-operation in this work altogether executed by the inhabitants of Paranaguá and to whom exclusively its existence was due. And there remained the inscription engraved in the stone as a remembrance of colonial injustice. Here it is:

1770

REINANDO EM PORTUGAL

DE SERENISSIMO SENHOR DOM JOSÉ PRIMEIRO MANDOU FAZER ESTA FORTALEZA

DILLUSTRISSIMO ECELLENTISSIMO SENHOR DOM LUIS ANTONIO DE SOUZA BOTELHO
MOURÃO. SENHOR DAVILLA DE OVELHA MORGADO DE MATHEUS, FIDALGO DE CASA DE SUA MAGESTADE COMMENDADOR DA FORTALEZA DE VIANA GOVERNADOR E CAPITÃO GENEBAL

DESTA GAPITAMIA DE SÃO PAULO NO ANNO
OUARTO DO SEU GOVERNO DE 1769.

It is quite original to note how badly this inscription was written, the spelling as well as the division of the syllables in the words that go over to the next line being all wrong. Here is the translation:

(1770. Reigning in Portugal His Most Serene Lord Dom José the first, His illustrious Excellency Senhor Dom Luis Antonio de Souza Botelho Mourão, Lord of the village Ovelha Morgado de Matheus, Nobleman of His Majesty Court, Comendador of the Fortress of Viana, Governor and Captain General of this port of São Paulo ordered this fortress to be built in the fourth Year of his Government 1769.)

From that fortress to the anchorage place is still a long distance and from the other side we see the ilha das Cobras (snake island), where the quarantine place is. This is a large quiet building looking as if it were abandoned.

At last, at the end of the ample bay all filled with rocky points, shewing that it is not so good an anchorage place as it looks, there lies the city, half hidden, behind the trees somewhat faded in its green shade, as it happens with all the vegetation in the salt-pit banks. Paranaguá is not, properly said, on the bay but at the mouth of the Itiberé river.



Antonina. - General View of the city

The steamers with draught above the average cannot enter the channel in front of the city, so that its modest stone quay is of no use, as the passengers must disembark in boats, and the goods discharged in lighters which bring them to the quay in fifteen minutes.

The city has no great importance. It is a group of houses, some with upper stories, a good hospital, and some old churches. In front of the quay is a sad screnity like in a hamlet, and the point of sea half confounded with the river takes the feature of a mild lake, dead, where the vegetation and white houses on the other bank reflect themselves in a trembling fidelity, like a picture.

Among other industrial establishments there is a good match factory, not of the importance of the Curityba one.

This city was founded in 1560 by a group of dwellers of Cananéa, a city of S. Paulo State. Later on there was some work in the mines going as far as starting a gold foundry, and that from 1627 to 1730.

ANTONINA. — It was formerly called Guarapirocaba (fat fish bay), beautiful indigene name that they changed in honor of the name of the prince D. Antonio Nosso Senhor, as we read in the document



Port of Morretes on the Nhundiaquara

when it became a village in 1797. It became a city in 1857 and is placed in another recess of Paranaguá bay between the Nhundia-quara and Cachoeira rivers.

It is a city that once had more importance than it has to-day.

The Graciosa road gave it life, making it the outlet of all Parana.

The railway, however, took away the commerce from that direction, and now it has to grow dependent upon its own resources.

Its population, quite select and hospitable, but very patriotic and with local partialities doesn't exceed 6.580 inhabitants, 3.218 males and 3.362 females. There are some good business houses, several churches, affirming the old development of the city, about



PANORAMIC VIEW OF THE CITY OF PONTA GROSSA

1.000 houses, many with upper stories. This is Antonina a port where the Lloyd Brazileiro Steamers call at.

Morretes. — A little further ahead is Morretes on the banks of the Nhundiaquara, and surrounded by pretty hills where the name comes from. It is quite hot there, and is delicious for those who like strong emotions. The city is apparently in decadency. Curityba kills it with its absorbing progress and its inexorable railway. The 6.500 inhabitants of Morretes have to develop a most delicate energy if they don't like to see their pretty little city disappear. It is necessary that Morretes should not die.

Yet it has been a great deal worse and weaker than it is to-day. Its 1900 census gave it 5.000 inhabitants and the last one 6.500. If it increases it is because it is not falling. It exports an exquisite brandy, many bananas, oranges and other fruit.

Ponta-Grossa. — One morning we were starting from Curityba station in the Ponta Grossa 8 o'clock train, The landscape was quite new for my eyes of Northern Brazilian.

Those who never went out of Rio de Janeiro and have only seen the strong aspects of the mountains crossed by the E. de F. Central ean't have an idea, or imagine what these Paraná fields are, with its pine-tree woods, its ondulations to obey to the same rhytm, its velvetlike prairies with several shades of green whereby seldom a soft river slides like a slow transparent rosin tear. The railway extending itself through that region connecting cities and nucleus, where life begins now gaily for the fair hard working and pleased populations. The lethargie sadness made of laziness and fatalism of the mixing breed of the Portuguese-African that we see in the interior of certain Northern States, run away frightened with the passage of the railway and there appear those groups of new generation, those new colonies, villages and cities. This phenomenon of our ethnical-social metamorphosis has in the railway one of its most strong factors. This, however, is what has happened in all America and everywhere.

But, as we said, the train left Curityba in the morning. It was full. The time of empty trains is past. And where are those who assured that that road would never give result? Last year it had a balance in its favor of 1.000:000\$000 and it has had one for a long time.

We went on. Every now and then there was a stop, a station, there were great piles of merchandise, lumber, pine-tree trunks all pilled up on freight ears. Wealth in elaboration. The landscapes follow one another with a variety of details, but without breaking the contornation lines which are the seal of that unaltered nature. Long fields with eattle in the pasturage, bands of reddish earth bordering the savanna, pine-trees suspending a sweet dark green eanopy over the endless valleys; near the tracks, little hamlets, covered with pine, cattle here and there, sometimes large plantations of grain with ears bending over the road, and the constant pine-tree, the pine-tree straight and vertical, standing up erect, with its majestic appearance and its top like a cup turned up towards the sky, near and far, in front and behind, everywhere, as the origin,



Popular types. - A basket-maker from the interior of Paraná

the cause, the end of all that scenery.

At four o'clock we reached Ponta Grossa. It was in the afternoon of the 25th of March 1903. We went to an Italian hotel.

Ponta Grossa has this name owing to the round thick rock upon which it is built. It was a bad selection for a city.

In 1871 it received the genteel name of Pitanguy, but, we don't know why, right after they gave it the name of Ponta Grossa. Owing to its location 947 metres above the sea-level it can be seen 60 kilometres away. That same circumstance brings to it disadvantages that are not to be envied. A large part of the year it is punished by the strong winds, raising clouds of red dust.

The city of to-day is colossal compared with the small little one of 1880, and the cause of this increase was the railway. It is built on the top of the hill, but its streets and buildings rapidly covered

the elevation and extend themselves through the plain, over an area each time larger.

The streets have no pavements. Its illumination is kerosene oil. On the top of the hill they built a large church of Roman style, not yet finished and the dome of which is seen from very far. There are several houses with upper stories, modern style, good business houses. Those with best aspect are of the Teuto-Brazilians and Germans. In the small square where the church is, is a quite modest building, ugly, square, which is the market, with one door on each side, and six small half circle openings to take the place of windows. The S. Paulo-Rio Grande railway, which passes near by can be seen away down. It is a fine building, perhaps the best in the city. The building of the Paraná railway is inferior to that. It is right at the entrance of Ponta Grossa, painted lead-gray colour and rustic style.

Near the city is the large matte factory Santo Agostinho, well known in the South of the country as well as in Rio da Prata.

Ponta Grossa has also its Club, the Pontagrossense Club, which is in a one floor building decorated with good taste. Its principal streets are: Santos Dumont, Quinze de Novembro, Ribas. There is no great movement in Ponta Grossa, but it is not that that makes it nostalgic and oppressive: it is the sensation of isolation and exile, which instinctively invades our minds when we contemplate that even horizon, infinite, unique, which we see all around, never mind which side we turn, a green sea of vegetation over which there seems to fluctuate islandlike, Ponta Grossa.

Lapa. — It is 893 metres above the sea-level and enjoys deservingly the fame of healthy eity.

There is a good deal of life in Lapa in the cultivation of wine, mandioca, beans, corn, etc. Lapa fruit is famous all over the State. It exports *matte*, lumber, hides and eattle in large quantity.

It suffered a good deal with the civil war but it has recovered now and is once more progressive and lively.

Castro. — Pretty city with 1.600 houses, and 11.377 inhabitants, 5.728 males and 5,649 females, when according to the census of ten years ago it had but 3.000 inhabitants. We can see how it has grown. What must we attribute it to? To no other element but the railway.

Castro, though more elevated than Ponta Grossa, as it is 957 metres above the sea-level, has not the disadvantage of the dust and constant cyclonical wind that sweeps the city. Castro is a pleasant city on the left bank of the Yapó river, and is connected

with its Santa Cruz district by a long wooden bridge, at the side of which is the elegant metallic bridge belonging to the railway. This bridge goes over an open space 80 metres wide and cost about 300:000\$000.

The place where Castro is located was formerly a residence of aborigenes. It is named after the king's minister Mello e Castro, the same who ordered every factory and every industry in Brazil, except thick cloth for the slaves, to be destroyed. We see that naming the streets after heroes is a mania that dates away back in Brazil.



Castro. - S. Paulo-Rio Grande Railway bridge over the Rio Yapó

Castro has good colleges and schools, catholic and lutheran churches, and some good buildings, which have been built of late, but in general are of that solid but not elegant style of the ancient times. Several lumber yards and suburbs decorate and extend the city which seemed to us be destined to a great future, especially when the S. Paulo-Rio Grande railway will realise its projected connection with the Sorocabana railway, in the S. Paulo frontier.

Guarapuava. — This is one of the highest cities of Brazil. It is 1.095 metres above the sea-level. D. João VI ordered an exploitation, by missionaries, of the famous fields of Guarapuava in 1809, soon after his arrival in Brazil, and this expedition, directed by Frei Chagas, a native of Curityba, arrived at that place on the 17th of June

1810. These fields, however, had been discovered on the 8th of September 1771 by lieutenant Candido Xavier de Almeida e Sousa, of São Paulo. Lately a good deal of business is converging to that place and the buildings multiply themselves, there appearing new hotels, saw-mills, work-shops, and Guarapuava is growing up.

The city properly said has not over 10.000 inhabitants but its municipiums are growing more populated every day, and altogether (the districts: Pinhão, Reserva, Campo Real, Capanema and Therezina) has over 21.000 inhabitants.



Gnarapnava. — Curucáca jump, Jordão river

Among the natural curiosities of the Guarapuava municipium we will mention the two falls of the Jordão river some 50 kilometres away from the city, of which the most noted for its sizes, as for the beauty of the seenery is the Salto do Curucáca (Curucáca jump). Though it has not the stupendous greatness of the Salto do Guahyra, the Jordão river one is celebrated on account of its location amid the fields and near a hill, from the top of which we can contemplate, the whole of that picturesque and beautiful Salto do Curucáca.

Campo Largo. — This city is a most picturesque one and enjoys a delightful elimate. It has 1000 houses. It comprises the Nossa Senhora da Piedade de Campo Largo and S. Luiz do Poruná parishes. Its population is 10.968 inhabitants. The city is 33 kilometres West of Curityba, with which it is connected by a carriage road called Matto Grosso. It is inhabited since 1814. In 1826 it had already a good church, the Piedade one. In 1870 it was considered a municipium by law of the 2nd of April of the same year.

Its exports of matte and lumber are worthy of note.

Tibagy. — It is the head of a rich municipium, it is upon an extensive plain, somewhat elevated, in relation to the neighboring grounds. It has good water reservoirs and a climate worthy of envy. By its houses, yet a little scattered and modest, runs the river it is named after. It has two churches, a catholic and a protestant one, several schools, fine matte factories, many cattle ranches, all near the city.

Palmeiras. — By the Paraná railway, at the left going to Ponta Grossa, on the top of the Campos Geraes mountains and by the river Ignassu. The houses extend themselves at the shade of a catholic church, the two towers of which, terminate in hemisphere form, painted blue. There are two other catholic churches and a protestant one, eight schools, a masonic lodge, two clubs, and is surrounded by colonial nucleus which supply it with everything it needs. It is the seat of a large municipium. The principal cultivations are the vine, corn, beans, rye, potataes and tobacco. In all the municipium including the seat there is: 1 physician, 2 lawyers, 12 cattle ranches farms, 3 saw mills, 2 matte factories, 1 flour mill, 8 wine distilleries, 30 dry goods and fancy stores, 12 grocers and hardware stores, etc., 3 butchers, 3 bakers, 1 billiard-room, 2 breweries, 3 brick factories, 6 horse shoers, 4 carpenters, 2 joiners, a tinware factory, 2 tailors, 1 barber shop, 3 shoemakers and 1 hotel.

Besides these, which are the principal ones, there are other villages and eities flourishing in the territory of the State which has 38 municipiums.

A large part of Paraná, however, is intact, ignored, and perhaps it is the richest part, covered with odorous forests of pine-trees, the providencial tree, the precious gift with which nature presented that State, as a token of affection and prodigality, to its hard working people and progressive development.

THE STATE OF SANTA CATHARINA

The first attempts made to populate this region were, very naturally, undertaken by Spaniards who considered themselves possessors of all the region comprised between the Prata and Cananéa rivers.

Not only ean we verify, by the study of the epoch, that this was the dominant orientation in the Court of Castella, favoring all the undertakings in that sense, but we also know that the dominion became effective making contracts for the colonisation of the S. Francisco and Santa Catharina rivers.



Florianopolis. — Monument to the patriotic volunteers in the Public Garden

The contract celebrated with Jayme Rasquin is an important document to clear this point,

According to this curious document, signed in Mådrid on the 30th of December 1557, Rasquin had to establish on the sea-coast several sugar factories, as well as he ought to found four cities in the following order:

Un pueblo en la costa del Brasil, dentro de nuestra demarcacion, en la parte que dicen San-Francisco, y otro treinta leguas mas arriba hacia el rio de la Plata, donde dicen el Viasa, que por otro nombre se llama el Puerto de los Patos; y entrando en nel rio de la Plata, etc.

(A village on the Brazilian coast, under our demarcation, in the part which they call S. Francisco and another thirty leagues above towards the River Plate where they say is the Viasa, which has the name of Puerto de los Patos (Dueks port) and entering in the river de La Plate (Plate River), etc.

It was this Rasquin, the first, as far as we know who had a regular establishment in Santa Catharina soil. These beautiful lands, to-day, with the limits of the old province, yet subject to the verification with Paraná form a State, the sixth in the order of the smallest of Brazilian States, having all the rights that the largest



Strait of the isle of S. Catharina and fort S. Cruz

have and enclosing in its 74,156 square kilometres of surface a very large number of natural wealth.

The true founders of Santa Catharina however, were Francisco Diogo Velho and his sons.

A Brazil writer said about it:

« Thus, then, in that abandoned and forgotten Santa Catharina soil, in 1650 appeared Francisco Dias Velho Monteiro (whom others call Francisco Diago) with four sons, victims of a dreadful wreck in the North point of the island called Jurié-Mirim.

Being a religious man with great faith in Our Lady do Desterro, as soon as he saw himself safe, having escaped such a great disaster he built upon a hill, (which is to-day Quinze de Novembro) a little

chapel, in adoration to the saint of that name, and the Capital of Santa Catharina — Desterro — was named after that fact.

In the construction of the chapel and residences he began to build he was aided by the natives, who soon familiarized themselves with the customs and language of the Europeans, quite astonished and surprised at the use of domestic objects they did not know. The houses were all built by the sea-shore, the first being called Rua dos Patos (Ducks Street), afterwards called Rua do Principe (Prince Street), after the republic they named it José Veiga, and lately changed the name of that native of Santa Catharina by that of Altino Corrêa.

The island had once the name of *Patos*, (Dueks), name of an aborigene tribe, which, with the carijá Indians, and others, inhabited there. They devote themselves to fishing and sea-life. Perhaps it is an inheritance from those habits the inclination the natives of Santa Catharina have for the sea-life, having had among them illustrious sailors, as Barão da Laguna and others.

It is really worth admiring the calm and conrage with which the inhabitants of the sea-shore in Santa Catharina defy the fury of the waves, now in small boats, narrow and flat canoes, by and bye in pretty yachts running the coastwise navigation of those ports.

The State received large erowds of German immigrants who established themselves in a tract of land having no easy means of communication. The lack of direct contact with the natives preserved among them, for a long time the language and customs of their fatherland, which only slowly become nationalized.

The colonies with that attachment of preserving their native customs have risen the suspicions of the Rio de Janeiro press. The newspapers of the Capital do not want to listen to a word about the work and useful value of those eolonies, and only see in them threats to the homogeneity of the Brazilian national constitution and even to the integrity of the Brazilian territory.

There is nothing, however, like a local examination to form a judgment upon such allegations. If we leave Rio, go to Itajahy or S. Francisco, take a small fluvial steamer, one of those that go to Joinville, or to Blumenau, examine everything in close observation, retaining what there is of good, according to the precept, we will see if it is worth while or not to speak about the *German danger* and similar foolishnesses.

It was that what we have done. We went there ourselves in April, 1903.

Desterro. — Is the Capital of Santa Catharina State, it is not in the territory of the State properly said, but in a large island in front of it. The same case as in Maranhão and Espirito Santo.

When we go to this port, we have to cross a long channel formed by the Atlantic, a narrow length of the ocean which goes on getting narrower between the continent and the island, until it reaches the minimum width of 400 fathoms in the place called *Estreito* (Narrows) between the city and a point of the continent prolonged by it.

The sail through this channel is most picturesque. At a certain place we see two small islands the *Ratones* ones, name that documents the passage of the Spaniards by that land. On the right we see the old fortress Santa Cruz, with a white light-house. There at the shade of those walls were murdered, or, justice was cruelly done to them, several prisoners arrested in the city in 1894 by the 7th battalion commanded by Moreira Cesar.

The city is in an elbow of the large island, looking towards the continent. It occupies the flat parts, between the sea and the mountain towards the inclination of which the houses are getting higher. The city is not a large one, neither is it pretty. It is composed of narrow streets, which run in parallel with the sea-shore and others transversal ones, which start from the sea-side in direction of the inclination of the small hills covered with woods which frame in velvet green the whole city.

Looking from the sea, the city is really pretty and divided into two distinct parts: the old city where is the commercial part of the city, the hotels, the storage houses, with their wooden docks (or bridges), and the *Praia de Fóra* or the new city where are the fine white residences and small farms of the wealthy part of the population.

We heard a good deal of German spoken here, as we hear French in Rio, Italian in S. Paulo, Spanish in Southern cities, Guarany (one of the Indian languages of Brazil) in Corumbá. Nothing, however, either local aspirations or eustoms or anything else confirmed the apprehensions of those who spoke to us in Rio about national character disfigurement. We never saw people more patriotic, more intelligent, more enthusiastic over Brazil than the inhabitants of Santa Catharina.

The largest number of the streets are paved, though not in a first class style. Some, however, like *Altino Corrèa* Street are paved with stone blocks. In the central part of the city is a pretty public garden, enclosed by an iron railing as they do in nearly every Brazilian city. This is one of the prettiest and best taken care of garden

we have seen. It is quite artistic as to the disposition and order of the flower beds, bushes, distribution of ornamental plants, etc. It has at one of the corners a pretty and light pavillion of painted iron and in the centre a monument in homage to the Volunteers of Paraguayan war.

This is a stone monument with the names of the Santa Catharina volunteers who died in the war written on the different sides of the monument. On top is a pile of cannon balls in form of a pyramid.



Florianopolis. - Panoramic view of the City

Generally, in Florianopolis the construction is of old architecture, pure colonial style, but they are now building some modern houses, elegant palaces, especially in Praia de Fóra, Matto-Grosso (to-day Admirante Alvin) streets and in several others.

That part of the population which constitute what is called popular masses, is of good habits, good natured and hospitable. The other classes composed of the rich, the learned, the politicians, the business men, the farmers, etc., do not differ in anything from the public of other capitals. They all make good friends with strangers and foreigners. It is a population open to the cosmopolitan sociability, but very jealous of their national personality. There nobody

believes or eares for what they say about the German danger, and Germans and Brazilians live in the best of harmony. There are no banks, neither fashionable dressmakers, nor jewelers, concert-halls, nor any of those luxurious exteriorities, so common in modern capitals, where the noise and pompous display of elegant life reigns supreme. Also, crime hardly exists there, neither are there scandals, disorders, riots or great sickness. It is a simple and sound land in the bosom of Abraham.



Florianopolis. - State Governor's Palace

The Governor's palace, a large and noble mansion, looking to the Matriz square, (to-day Almirante Gonçalves square), is located at the side of the church. Inside it is full of good paintings, golden and high relief decorations, having a marble vestibule and stairway of sumptuous appearance. It is the newest and the best building of the city, with gardens on the sides and illuminated by acetylene gas. It has two floors and a beautiful front looking to the square, It is beautiful appointed and decorated with good taste and even luxury.

The public market is a large building also of recent construction, rose color, which gives it a resemblance with that of Santos (though this one is much superior to it in size and architecture). It is a dou-

ble gallery on a parallelogram basis, with many doors, those of the interior looking to a yard neat and clean. All the building is covered with zine, at whose shade that multitude of buyers and venders move here and there. It is in the centre of the city by the sea-shore near the Custom-House.

We found the Custom-House well installed, in a two story building, in nothing having the mean aspect of those of Paranaguá, Maeeió, or Manáos.

The City Hall is another good building, a solid one. If it is not of a noted architecture, yet is easily distinguished from the other old



Florianopolis. - Da Santa Casa Hospital and beach of Sacco dos linões

style buildings with plain walls. It is located at the corner of Tiradentes street and its front looks to the Public Garden.

The Charity Hospital is upon a mountain and its snow-white structure presents a mild relief upon that green bottom, the deep green of the woods on the hill side. It was built in the same place where the old hospital was built, in the eighteenth century. Its fundamental stone was placed by Peter II in 1845, as the latin inscription over the doorway, right at the entrance shows it.

It is directed by Sisters of Charity, Irmās da Providencia (Providence Sisters), both Germans and Brazilians. In the main hall we saw a beautiful painting, a true work of art, representing a specialist

on eye diseases operating a patient. Though it has no date they say it is one of the first works of the eelebrated Brazilian painter Vietor Meirelles.

The Nossa Senhora do Desterro church is a large building plaeed at the bottom of a hill in front of the public square where there is a garden, with a pretty stairway to go up to.

There is nothing worthy of note in the exterior of the church. It has the form of a parallelogram, a plain front, looking to the



Florianopolis. - Cathedral

Public Garden. The entrance and the corners of the front are of mason work. The basis and front is a good deal wider than the top and ends by two square towers. Internally besides the main altar, there are two others at the side and two small chapels. The choir is supported by wooden columns of octogonal sections, painted blue. The walls are plain and white, without pictures or golden decorations, everything modest and simple. There is a rich image of Nosso Senhor dos Passos.

This image, according to what tradition tells us was not destined to receive the catholic worship of the Santa Catharina people. It was sculptured in Bahia for Rio Grande do Sul, but the designs of Providence didn't want it so.

It was in the year 1764 a boat sailed from Bahia to Rio Grande do Sul, carrying the artistic image. Reaching the bar, the sea was so strong that the boat could not venture to go in, and so looked for shelter in Desterro. A new attempt was made with the same result and still they tried a third time in vain, and the captain seeing in this the will of God wishing the image to remain in Desterro left it there.



Florianopolis. - The port and Commercial Quarter

· The city has other churches but all of them without any artistic value as to their architecture.

Another fine building is the Barraeks of the Police force. It is a large building with two floors and two side wings with many windows with iron railings. One of these wings is the jail.

The military hospital, the theatre, the Apprentices School, are other buildings of relative importance. None of them, however, impressed us as much as the factory of Mr. Carlos Hoepke, in a place called Santa Rita. It is a wire-nail factory, always active producing enough to export to the northern markets of Brazil.

The city has some beautiful places wherefrom charming lands-

capes can be observed with great enjoyment, as Prainha, José, Mendes, and the pretty place called Sacco dos Limões (Lemons bag), which is the lap of the sea-shore upon the blue and pacific water of the bay and there are no interjections of pleasure and admiration being able to translate what the eyes can see and enjoy. From any high point of the city we find admirable perspectives of exentric relief and mild hues.

The shores of Desterro are not muddy as those cities with rivers, neither are they of plain sand as those of some places in the Atlantic, but are filled with stones large and small, standing here on the shore, there half sunk into the water, some rough and some polished and some with a little vegetation springing from their corners.



Florianopolis. — Esteves-Junior Street

In the evening the city is sad, quiet and sleepy.

For those who are in the habit of hearing the noise of the great centres, *Desterro*, is as its name indicates a perfect exile. There is complete silence in the city, discreet lights speak to us through the closed window-panes of that calm poetry of home which is a compensation and a treasury. There is no wordly life, neither the noise of the nights in a cosmopolitan city. One or other coffee-place and billiard-room may be open till ten o'clock.

The kerosene oil lamps light the desert streets with a sleeping dull light and by moonlight they are economically put out. On the sea-shore the sea polishes the stones and rocks softly but eternally.

Public Instruction, police force, industry and commerce. — Speaking of public instruction in the State we must cite the Arts and

Trades Lyceum. It has 100 pupils and occupies an appropriate building, having annexed a library with 5.000 volumes, and the Museum, which is there provisionally and has good sections of archiological curiosities, anatomic anomalies, important collections of mineralogy, numismatic, shells and Brazilian woods.

The State has a Normal College, with 30 papils; a Gymnasium; one Veterinary and Agriculture school in Blumenau; a Gymnasium in Tubarão, another in Laguna, at the expense of the municipalities.

There are in the State, 190 grammar schools, maintained by the government, and 100 private ones.

The State police force is formed by an infantry company with 250 men with nice blue uniform and white belts and commanded by a Lientenant Colonel.

As to public transportation, there are several carriage roads in Santa Catharina, and two railways. One is the short railway Estreito to Palhoça, now under construction, the other is the D. Thereza Christina railway connecting a place called Minas, in the Tubarão Municipium, with the Imbituba and Laguna ports, serving these two cities and Tubarão with 116 kilometres of tracks.

It is going to be extended till — Massiambu — a near sea-port to aid the exploitation of great mineral layers in Tubarão.

Blumenau and Joinville, old Teuto-Brazilian eolonies were made eities. We give below the population of these colonies in 1890:

Blumenan				Brazilians	Foreigners
Males .				12.900	1.419
Females				11.901	1.523
Joinville					
Males .				7.043	208
Females				6.501	244
Tubarão					
Males .				7.491	518
Females				7.053	478

The production of these eolonies as that of all the State is quite varied. Industry progresses actively and many of Santa Catharina products find market in Rio and S. Paulo competing with advantage with similar home and foreign products.

Besides the Rita Maria wire-nail factory, there are breweries, canned goods factories, cane goods, artificial flowers, soap, furniture, carriages factories, dairies, vinegar and fruit wine distilleries, coopers works, threading mills, wooden shoes factory, eordials, lime, matte factories, saw mills, brick works, and others, established in the Capital and in the interior.

The trip to the colonies is easy and comfortable. When going to Blumenau we take in Rio the coast steamers calling at Itajahy and in this city we are transferred to a small river-steamer that goes up to Blumenau. Going to Joinville we take the steamers calling at S. Francisco, transportation facilities to that city being easily found.

* *

PRINCIPAL CITIES OF THE STATE. — Those who want to express judgment on the value of Santa Catharina, on its progress, on its



Blumenau. - Gigantic palm tree, palms 9 metres long

capacity for evolution, without seeing but the island and its Capital to be sure will make a mistake. It is necessary to go to the interior to know Santa Catharina, and of all the interior no region will show more evidence of economical puissance but these colonies the seat of which is Blumenau.

The little steamers going from Itajahu to Blumenau take 8 to 10 hours. When we arrive the panorama of the city is very pretty, though it has nothing of importance. It is a small city with 24 to 25.000 inhabitants, most of them Brazilians, Germans descents who live there quite mixed with Brazilians, Italians and other nationalities.

The port is a most picturesque one as in general every port with a river the stream of which is not strong. The banks almost disappear under the vegetation of ever green and weed. On the river we see some yachts painted with gay colors, and two or three small steamers.

From there we see the City Hall a nice two floor building with another story in the centre, German style, all white. The Mayor (or superintendent, as they call him there) was when we visited it, M. Alvius Schrader, a Brazilian German descent, and the president of the municipal council M. Francisco Margarido.

The 15 de Novembro street starts from this point neat and wide, crossing near by the Doctor Blumenau street. Dr. Hermann Blumenau after whom the city was named was a German philantropist who over 50 years ago obtained a grant of lands from the Brazilian



Blumenau. - Municipal Chamber

government, placed a few marks in his pocket and with a crowd of farmers went into the interior of Santa Catharina and founded this colony in 1850.

Dr. Blumenan was a generous man, tall, strong and a learned man, doctor in philosophy, full of courage and humanitarian ideals,

He did not pay much attention to money. His ambition was to free the negro slaves. He was very sober in his habits, a foe of anything and everything dishonest. The Brazilian government in appointing him director of the colony did a wise measure. Many contos passed through his hands but when he left his position was just as poor or as rich as when he first took it.

In 1864, tired and old, seeing his work quite ripe — he was then in that age when the remembrances of the first years burst from all

sides of our thought — he wanted to see his old fatherland and went back to Germany. His work had been completed the colony was emancipated.

He lived there still fifteen years often repeating: « what a mistake to have left my dear Blumenau!» and he used to receive with great demonstrations of contentment any acquaintance or friend who might bring him some news of his colony, to-day a free and lively eity.

Blumenau is always growing, its streets have fine arborization, palms and other trees, new houses with artistic fronts, nice verandahs are built every day, here, we see a gothic church with its tower, a catholic one, there, a protestant one, both of them pretty, and there are fine churches in this colony. Are worthy of note the Gaspar and Rodeio districts catholic churches. The Santo Antonio college is an important building with four floors, but as to its external beauty the S. Paulo college of German style is not inferior to it. Notwithstanding, the commercial houses present models of architectural construction which can be compared with advantage with the constructions of the old city. Even the residences of modest families are so neat outside, so well taken care of, are relatively so artistic, that it looks as if they could serve as model or standard to many expensive constructions in the large capitals.

But that is not all. We take a little carriage and ride a little through those fine roads. We see large fields and pastures on both sides, fences, modest houses of the colonists showing in spite of their modesty comfort and abundance. None of them would sell you for love or money that house and lot maintained and enriched by their work, growing better year after year, and treated with a care that can hardly be believed. It is difficult to find an empty lot, and much more so because there are no discontented colonists there.

Blumenau cultivates and produces everything: sugar cane, coffee, tobacco, grain, vegetables, cattle, etc. There are settled as small real estate owners, Brazilians, Germans, Italians, Poles, who are only distinguished by the language and preferences they devote to certain cultivations, while time and atmosphere did not complete the unifying work. Like this one, though in smaller scale, there are other colonies: Brusque, S. Bento, Rodeio, Aquidaban, São Paulo, Cedros and several others. None, however has the importance of Blumenau.

JOINVILLE. — We will say a few words about that gem of Santa Catharina cities. It is probably the prettiest of the State. It has a population superior to that of the Capital and a much more progres-

sive aspect. Its buildings are modern ones, predominating those of German style, but not very large. The streets are wide and paved, and they are kept with perfect cleanliness. Its fire department is worthy of a modern city. Its president of Municipal Council was Mr. Bernardo Enzmann when we were there. He is an active and energetic man who never feels tired. He is always improving public services and the administration of the city as well as the Mayor Mr. Procopio de Otiveira. There are many factories, several hotels, book-stores, printing offices, good newspapers, etc.



Laguna. — Panorama of a part of the city

After Petropolis it is the best eity of German origin in South America.

Tubarão. — On the banks of the river with this name is Tubarão city connected to Laguna by a railway (the D. Thereza Christina). It is a progressive city destined to a great future with the exploitation of the layers of coal existing in the municipium now beginning to be worked up and they have verified they are the largest of its kind in the whole world.

S. Francisco. — Is a picturesque city, one of the oldest in the State, as it was a village already in 1660. We were there and can write with conviction of the greatness and excellency of its port, certainly the best, south of Santos. It is called Babitonga bay or

S. Francisco bay (as some call it). It is quite deep until near the sea and there ships of deep draught can anchor. Some of the few rocks in the bay have buoys to point them out, allowing the navigators to keep away from them even at night.

Through the south bar, called Araquary, the access is easy for small boats as yachts, launches and canoes. It is much sought for especially by the boats coming from Itapoeu and Barra Velha, vessels that bring flour, beans, starch, corn and other grains to the market.



D Blumenau, - Founder of the city of that name

Every inch of the territory of this municipium is fertile, and gives good returns to those working it.

Before reaching Babitonga bay, we were anchored some time before Graças island, a high hill covered with thick woods. It is the largest of a group of picturesque islands near the coast.

We left Graças island at 6a. m. entering through the southern bar. Turning round to the left there is the green point, peninsular one, on the hill of which is a light-house. We entered a little sea of free but clear waters bound at the right by the hill. The bay is like a looking-glass bright and immovable. Several yachts are anchored there, others

slowly move by a weak breeze. The city is in the island, in front of the continent. We see some new buildings, and the houses constituting the city wrap on both sides the hill quite green forming the spine of the city. On top of it we see the ruins of a construction abandoned before it was finished. It is a church of which we only see four naked walls, its paneless windows like an empty eranium looking to the life which animates both the city and the port.

The white of the houses violently strikes the sober green of the hill. Above the houses raises the old tower thin and tall, ending by a blue half sphere. This is the Matriz church built for 5:000\$000 in the eighteenth century at the expense of the neighbors. To-day it would cost no less than 300:000\$000.

On the right, in a prominent place is the market, square, heavy, yellow, with a central door and six windows on each side. There is also the Commercio Hotel a two floor building, where the *tourists* stop.

From this place starts a trans-Brazilian railway which is being built by the S. Paulo Rio Grande Company between this port and Ignassu.

ITAJAHY. — This city which we have already referred to, is a picturesque city located in a curve of the sea-coast and at the mouth of the Itajahy river, but of difficult access when the season of the southern storms comes on.

The point of land situated a little before the city, which is called Cabeçudas, is an enormous series of rocks, on which they built a light-house, supported on an iron column. It is one of the ports with bigger commerce in the State and though it has only 15.000 inhabitants, it presents the following commercial movement during the following nine years:

		EXPORTATION	
Years		Interior	Exterior
1892		1.598.246.840	15.860.000
1894		1.201.463.100	_
1895		1.248.175.290	_
1896		1.990,195,990	9.547.600
1897		1.969.752.144	119.719.100
1898		2,247,459,042	102.566.027
1899		2.724.118.400	53.918.400
1900		1.815.015.144	85.995.800
1901		1.679.506.407	174.317.880
		16,271,934,357	559.722.807

Total in nine years. 16.851:657\\$164 Annual average. 1.870:184\\$126 Lagos. — This prosperous up-hill city, head of a rich cattle raising municipium, was founded by S. Paulo people in 1774 and was formerly called Nossa Senhora dos Prazeres. It is 800 metres above the sea-level.

It has now about 500 buildings, all inhabited by a population of about 4.000 people.

It has some houses with upper stories of fine appearance, modern construction and four churches as old as the city.

It has a fine market and a small theatre with a seating capacity for 500 people in a quite nice building.

It has also a college directed by priests of the Franciscan order, where modern methods are adopted.

In the main square of the city they initiated the construction of a church to be the Matriz of the city. They also inaugurated a large and elegant building all of it stone work which is the City Hall.

This eity has 10 streets, several lanes and cross-streets, and four public squares.

The municipium has but five public schools supported by the State, a number unsufficient for the public instruction of the poor children who wish to frequent them.

The municipium supports several other schools which are well frequented.

Several private schools are spread in this region supported by the chiefs of households and they are not in small number.

The wealth of the municipium is the cattle, which is far better than that of Rio Grande do Sul. They export annually from 20 to 25.000 heads. There are enormous fields and endless forests. It only lacks hands and railroads — the problem in all Brazil.

LAGUNA. — A sea-coast city of large future possibilities, for its business. It is a pity that its port cannot always allow the entrance of ships that run or eall at this port. This city was founded by the sons of that Diogo or Dias Velho about whom we spoke above.

Dias Velho Monteiro was killed by treason by the sailors of a Dutch ship who put into the harbor of Cannavieiras. His sons fled to the continent where they founded the place of Lagoa, to-day eity of Laguna, the first point which was populated in the Santa Catharina continent.

Laguna is the Spanish for Lagôa (lake); it proves the historical occupation by the Spaniards in that part of the country. It is an active and commercial city. Its aspect is pleasant for the regularity of the buildings, and alignment of the streets. By the last census it has some 10.000 inhabitants.

Through the Laguna port merchandises were exported from 1892 to 1901 as follows:

Vears				Interior	Exterior
1892				660.729.875	15,338,240
1894				847.704.525	30.678.200
1895				631.749.698	27.337.200
1896				1.011.957.861	35,666,200
1897				1.568.910.525	195.068.150
1898				2.069.470.943	205.294.980
1899				1.950,565,556	298.801.600
1900				1.206.510.860	245,282,500
1901				1.126.524.180	_
	Tot	al.		11.074.124.022	1.045.486.870
	Tot	al		12.11	9:610\$892
	An	nua	l ave	erage 1.54	3:290\$099

Ararangua. — Is a village that already deserved to become a city. In the same conditions are S. Sebastião do Tijucas on the banks of the river Tijucas, Brusque, on the banks of the river Itajahy-mirim, S. Bento, Bella Vista de Palmas, União da Vietoria, Nova Trento, Palhoça, Rio Negro, Curytibanos, Campos Novos and S. Miguel, cities that are being developed.

THE STATE OF RIO GRANDE DO SUL

This is one of the most important States of Brazil.

Leaving the hilly lands of Santa Catharina southward, the seacoast assumes quite a new feature. After those mountains of vegetation mingled with dark quarries and thick woods, come low seacoast lands with naked sandy shores, that seem not to end any more.

Shortly, sailing near the coast — what is only possible to be done by boats of short draught — we see the shores ealled Fernambuco or Pernambuco, and afterwards the Mostardas, long white savannas lining the short sea-coast on the extended continent as a wall between the ocean and the Lagôa dos Patos.

This band of land has a narrow solution of continuity, at the South, and that is the Rio Grande bar which gives access to the vast lake.

In that place precisely the coast is very low, but really very low and sandylike. The Atalaia light-house marks the proximity of the bar. But the channel is so curved and long, (over 10 kilometres) that until we enter the port Atalaia is always seen, though in several positions. To the right and left in the channel there are many buoys, some with bells, some with lights, other simple fluctuant buoys. The sea there is generally rough and seldom a steamer enters without being violently rocked and it is always necessary to take a pilot aboard. At last within the anchorage place, the port shows its beauty and the view of the city pays well for the discomfort of the trip.

The State has a configuration of lines perfectly homogenious, assuming a rhomboidal form, only one of the angles being the Brazilian sea-coast, the other three being land frontiers, the largest part



Dr Borges de Medeiros. — Present Governor of Rio Grande do Sul

of which are boundary lines of foreign lands. This circumstance compels the Federal Government to always have a considerable detachment of troops in this State.

This is one of the most populated and most advanced States of Brazil. The European immigration goes there in large numbers, especially from Germany and Italy, thanks to the similarity of the climate and meteorologic analogies with certain portions of Europe to which advantages we can add the one of the fertility of the soil. Its population is of over 1.200.000 inhabitants. They are hard working industrious people, and would share a good portion of national exports were it not the drawback of not having a good sea-port.

Its Capital which is developing very fast cannot be visited by

the large transatlantic steamers and even some of the middling size steamers of the Lloyd Brazileiro get caught in the low tides while crossing Lagoa dos Patos on their way to Porto Alegre. This has happened to us when in May 1903 we were going for the first time to Porto Alegre.



Gaucho Costume

Though the Rio Grande people do not differ from the general Brazilian type, as we verified by self observation, as to their physical appearance and moral standards, they have, however, habits and eustoms in their field-life that are not to be found in Pará, Bahia, or any other place of Brazil.

Every locality has its little traditional habits, that can only be adopted in that very locality, and are forgotten or disappear

with the first contact with the railway and especially with the surroundings of eity-life.

In these everything loses its personality and peculiar characterisation, to be melted in the generalized and uniform Brazilian type, with common ideals, common history, laws and language, — « the infallible distinctive of national character, » — quoting the exact expression of Mr. Döhne. This is what happens in Rio Grande do Suf.

But it causes an agreeable impression to the *tourist* and the observer to find a cow-boy in the interior of Bahia, a *caipira* (the man of the interior who never comes to the city) in the interior of São Paulo, or a Rio Grande *gaucho* (cow-boy) in the eattle ranches of this State, Santa Catharina and even in Paraná.

The clothes are different but none of them have the peculiar showy dresses of the gaucho.

This type — o gaucho — is in southern Brazil, just what the cow-boy is in the West, as far as his work goes and even a little as to some habits.

He dresses bourbacha (a kind of wide trousers) tied at the feet at the side of the shoe, the ponche, a kind of cape or rather a woollen shawl with an opening in the centre, through which he puts his head, the shawl resting on the shoulders, and wide brim felt and soft hats. The gaucho with his favorite clothes, his cow-boy habits, his matte (Brazilian tea) without sugar, and his popular songs, is the most characteristic type of the interior of Brazil.

* *

But let us write about the physical aspect of the Rio Grande territory. We have already said that its sea frontier is relatively ungrateful — sandy and low — and had this peculiarity: it has not one single island (not being the rock in front of the Torre do Norte). It has an extension of 950 miles.

In compensation, the interior region, with immense fields and eattle ranches, with mountains, with enormous forests, is a most wonderful world. It is in this mountain region, ealled as in Paraná and Santa Catharina the *região serrana* that abundant rain falls and mark better the four seasons of the year.

A dreadful peculiarity is the strong breeze that blows on the sea-coast during winter, it ents like a knife, very cold, which in Rio Grande they call *minuano*, and in the United States they call *cold wave*. We had to try it, against our wishes both in April 1889 and

May 1903. These winds come from the Andes and even the natives suffer with them.

The Rio Grande do Sul being the State that is further south is the one having the climate more similar to the European.

Its three large eities are placed in the interior margin of Lagôa dos Patos, a true fresh water mediterranium, named after the indigene family that together with the Carijos and others populated all the southern coast from Santa Catharina down. It is so wide that from one side of it we cannot see the other, having, so they affirm 9.000 square kilometres of surface.

The city of Porto Alegre separated from the ocean by a barrier



Porto Alegre. - Isle of Pedras Braneas and powder magazine

a few leagues long can only be reached after an extensive turn after entering Rio Grande bar, and 24 hours navigation northward through that lake.

Porto Alegre. — For the tourist, however, this enormous distance is compensated by the extraordinary panoramas of this trip: a most ample surface, ample and calm, of a grayish green evading hue with large spots, marking the differences of bottom, or the presence of sandy crowns that the steamer, steered by the pilot, tranquilly avoids. This is the Lagôa dos Patos.

A quarter of an hour before reaching the Capital we see in the river waters a gay island formed with enormous rocks half decorated with green trees, and it is in that island that the Federal Government keeps their powder magazines.

They call that picturesque spot Pedras Brancas and, at least when we saw it, it was of a snow-white pretty as silver reflecting its bright whiteness under a morning sun in May on the waters below.

Since then we begin to see the Capital which is covering some low hills at the East of Guahyba. In front a few islands and ramifications of other rivers gather together there gaily and picturesquely. The buildings cover the hill side as a cloak of variegated colors, and come away down lining the quay and extending a border of storage houses and commercial docks upon the river waters running bright and clear.

The nearest buildings can be distinguished at the entrance of the



Porto Alegre. - Lower part of the city

port — they are the Menino Deus district — in an ample curve of sea-shore. On the right is the large barracks, all white, seeming to have its foundation sunk in the water.

When our boat was at anchor, and during the legal formalities of custom house and board of health visits, we admired that charming panorama of the city. It was beautiful! It reminds one of the scenery at Bahia, the buildings, however, being more modern ones.

We see on the right, at a little distance, the large buildings of the Poorhouse with its white tower pointing towards the clear blue sky. Further, some houses mingled vegetation covering the plain between the river and the hills. On a promontory somewhat elevated is concentred the bulk of the houses, dominated by the two high white towers of the Nossa Senhora das Dores Catholic Church. Surrounding the massive body of buildings, there are some public squares and gardens, leaning towards the quay: one is the Harmony one, the other Alfandega. We do not remember the names of the others.

In this part of the plain, almost near the water, is the majestic building of the municipality the front of which looks to the square on the land-side.

Landing near there, the visitor can see with pleasure this pretty building. It has two upper stories and ground floor. The principal body is a little inside, and crowned by a kind of tower, which used



Porto Alegre. — Municipal building

to be the distinctive characteristic used by all the City Halls and churches. The two side bodies are decorated with columns.

A stone quay dresses this part of the city connected with the anchorage place by several wooden bridges with their respective storage houses. Alongside these bridges are a lot of yachts, steamers and lighters, making constant noise while loading and unloading, and that lends a lively tone to the port, though in a smaller degree than is noticed at Rio Grande.

There, near the quay, is the public market, a large, square, stone building divided into small business houses, and in the centre a vast yard with an ornamental fountain completes the whole. There is an abundance of fruit, dairy products, vegetables, fowl, etc. The prices are a revelation to those who come from Rio and would not be believed in Belem or Manáos, so moderate are they.

Porto Alegre has water in abundance. The public illumination is with hydro-carbon gas as in Pelotas and Rio Grande and the private illumination of the houses is by electricity.

The suburbs: Gloria, Navegantes at the North, Partenon, Moinhos de Vento, Floresta, etc., at the South, are pretty and all connected by tramway lines which transport in one year about 2.600.000 passengers.



Porto Alegre. — 7 setembro street

The nieest public place of the city is the Park, where not many years ago a general State Exhibition was held and where is to be seen a pretty summer theatre, several architectonic pavilions of iron and wood, gardens, birds nurseries and menagerie, everything illuminated by electricity. This is the attraction place where the high-life of the town meet.

The public squares with gardens in the commercial part are very pleasant. There is the General Deodoro square where they built a statue of the Conde de Porto Alegre, the brave general native of Rio Grande.

The Alfandega Square (Custom House Square), is named thus because of the Custom House being near there. It is a dráwing-room of the eity. It is there that we await for the tramway, that we read

the papers, that we take a little fresh air, and it is the thoroughfare for the circulating artery of the city, the Andradas Street.

The General Marques square, is propably the largest but has no garden.

The most central square, and one with a bad history is the Harmonia one, with benches, flower-beds and plants. It was there that the prisoners convicted to death were executed. Even as near as the 3rd of November 1857 they executed there: Domingos Baptista and Sergeaut Felix, who in 1853 killed, for the purpose of robbing him, Manoel Tavares, a Portuguese, and they also executed then Florentino, a negro, who killed Antonio Soares Leão his master in Belem. These were the last executions which took place in the Rio Grande eapital. At present people walk around there gay and free, without remembering the sad eelebrity of that square.

Among the prettiest streets of the Capital, the newly arrived cannot help noticing the Andradas street formerly called Praia Street. In fact this street runs parallel to the shore, (praia means sea-shore). It is a long street of uneven width, lined with nice houses, carefully paved, with mosaic sidewalks, and it is a lively thoroughfare. It is to Porto Alegre, what Ouvidor Street and Central Avenue are to Rio de Janeiro. In this street are cafés, brasseries, fashion establishments, jewelers, several newspaper offices, lawyers offices, agencies, etc.

The Bragança street is pretty, wide and somewhat inclined, lined with nice buildings. The Voluntarios da Patria street is quite a long one through which run the Navegantes line of tramways. This street has many factories, whose chimneys are their best ornament, and it lines the sea-shore. Generally the streets in Porto Alegre, are not straight, neither are they wide. Many like those of Deus Menino district are tortuous forming both curved and broken lines. There are many up-hill streets, what is naturally the city being built up on a hill. It is not large like Bahia, Recife or Pará. Its buildings are old and as ugly as those of Rio or Bahia, but there are many new buildings quite artistic in German and Italian styles which have largely contributed towards the material evolution of Rio Grande do Sul.

The public buildings reflect the progress of the city and the following are the best of them. The Engineering College, a modern two floor building, near the Park. The Catholic Seminary also a fine building. The local Legislature building; the Atheneum; the Normal College; the Medical College; the Public Library; the Government Palace; the Provisory Palace, large square building of olden style;

the Charity Hospital, a large two floor building, painted yellow, Portuguese slyle, divided into two bodies, connected by a central front, and a modest church, at the right end, the theatre — S. Pedro, — fine building but of little architectural value; the Providencia bank; the Commercio and the English banks. The Insane Asylum; the Military College, a large square building, rose color at the end of a large square without any garden; the German church; the Catholic Cathedral, an old church, very pretty inside, but with unimportant architectural style; the Barracks; the «Julio de Castillio » palace and many private mansions.



Porto Alegre. - School of Livil Engineers, Arts, and manufactures

This city has a great commercial activity, great movement of carriages and trucks, tramways, etc., many clubs, first class newspapers, Federal and State telegraph, telephone company, hotels. Including the Pedras Braneas, Barra, Marianna Pimentel districts and islands in front, the population of Porto Alegre is of 73.574, twelve years ago it was only of 52.421 inhabitants. This shows how it progresses.

Yet this city is not one of the oldest in Brazil. In 1742 some 60 couples from the Portuguese islands went there to found a colony. They were sent by the king Ď. João V. This explains the name of Porto dos Casaes (caseas means couples). It became a village in August 1803 and city in Novembre 1822, with the title of Leal e valorosa cidade (Loyal and Brave city). This title was given to it in 1841.

The great prosperity of Porto Alegre only began after the immigration brought to the State the vigor of their impulse. It is the same old story of the United States, Australia. Argentine, S. Paulo.

From there railways start, fluvial steamers, telegraph and mails. It is a commercial and active centre of first order.

* *



Porto Alegre. - Julio de Castilhos place

Public Instruction, police force and transportation. — «On the literary and scientific side », thus wrote E. Reelus, « Porto Alegre ean be considered as a kind of Capital, thanks to its schools, colleges, newspapers.» There is in Porto Alegre besides the Military College, maintained by the Federal Government, the Engineering, Medicine, Pharmacy, Law and Theology Colleges, Normal College, Gymnasium, several schools for males and females, and outside of the Capital: a Lyceum for agriculture studies in Pelotas, and another in Taquary, etc., Besides these there are the district schools of Porto Alegre, Taquara, Montenegro, Taquary, Santa Maria, Santa Cruz, Rio Pardo, Livramento and Cruz Alta, which had the frequentation of 1.400 students in 1903.

For the elementary instruction the State was divided into seven districts, counting 965 public schools thus distributed:

3rd degre	ee :						
Filled						٠	174
Vacant							- 0
2nd degr	ee :						
Filled							109
Vacant							2
ist degre	e :						
Filled							676
Vacant							4
	,						965



Porto Alegre. - Santa Casa da Misericordia hospital

The school population in 1903 was more or less 36.000 pupils, the Porto Alegre municipium alone having 6.688.

The Rio Grande do Sul State keeps a large body of troops: a brigade militarily organised, with 3 infantry battalions, a eavalry regiment, armed with modern rifles and well equipped, several provisory infantry and eavalry companies on the Uruguayan frontier to do police duty and protect it against conspirators who go over to the neighboring country for the organisation of political fights.

The eapital municipium maintains a battalion of guards, a kind of French gendarmerie, with light blue uniforms which are one of the lively notes of the Porto Alegre streets. Each municipium in the other cities has, in the same way, a little company of guards. The fire

department forms another militarized company in the Capital.

We spoke above of the Porto Alegre tramways. They are driven by animal traction as those of Pelotas and Rio Grande. As to railways there are the following: the Porto Alegre to Uruguayana, 638 kilometres long, but only 374 in operation, till Cacequy, and the S. Gabriel branch line, with 76 kilometres. It starts from the right bank of the Taquary river where is the main station, called « Margem » station. Yet there runs between this place and the Capital a daily line of steamers of the Companhia Fluvial.

The Rio Grande to Bagé railway, with 283 kilometres in operation, going through Pelotas. It will cross by and bye, in Cacequy the Porto Alegre and Uruguayana railway.

The Porto Alegre to Nova Hambugo railway with 34 kilometres, going through S. Leopoldo city. The State Government is going to extend it till Caxias village, which will take about 130 kilometres, erossing the important municipiums of S. Leopoldo, S. Sebastião do Cahy, S. João do Montenegro, Bento Gonçalves and Caxias, with a population of over 100.000 inhabitants, also serving the neighboring municipiums.

The Santa Maria to Itararé railway, with 262 kilometres running till Carajinho, 100 kilometres beyond the Cruz Alta eity through which it goes, and soon it must reach Passo Fundo.

The Quarahy to Itaquy railway, with 180 kilometres, crossing the Uruguayana eity.

The small railway which starts from the Juneção (Junction) station, crossing of the Rio Grande to Bagé railway with it. This line goes to the summer resort Villa Siqueira a sea-shore place, belonging to the Viação Rio Grandense Company.

There are several railways under project, as well as the plan of a canal from Tores to Porto Alegre, taking advantage of the immense series of lakes being along this shore.

Of these roads one belongs to the Federal Government, — the Porto Alegre to Uruguayana one — all the others belong to private concerns. Rio Grande do Sul has railways running over a total of 1.610 kilometres.

* *

Industry, Production and Commerce. — In relation to other States of Brazil, Rio Grande do Sul has an advanced manufacturing industry, not speaking of the dairy industry in which it is one of the first producing States. It exports dried salted beef in large quantities. What is worthy of note is the variety of its manufacturing industries

either in the Capital or in other cities. We saw there cotton mills, matches factories, threading mills, hosiery, furniture, hats, shoes, combs, gloves, eigar, masses factories, canned goods works, glassware, arms, safes, soap, candles, earriages, harnesses, broom factories, ready made clothing, pharmaceutical products concerns and many others. There are yet factories to rule paper, book binderies, printing offices, typographing establishments and ship-yards for the building of small boats.

The national wine is also manufactured in large scale, principally in the Italian colonies, lacking yet the convenient preparation to allow it to be exported. There are also, vinegar, cordials, and brandy distilleries as well as breweries.

The lard factories is an industry the reputation of which is already made, and there are quite a number of factories in this State.

The cheese industry is large as well as the butter one, but only for local consumption. It seems, however, that these industries are going to be largely developed.

Excepting Rlo and S. Paulo no State has its industries so much developed as Rio Grande do Sul. While it progresses in these it does not, at the same time, neglect its agriculture.

In the interior are large beans, mandioca, corn, potatoes, rice plantations, and others, which not only furnish the Rio Grande market but are exported. Rio Grande do Sul, we might say, is the grain storage house of Brazil.

Besides what it gives to the internal consumption, it sends to Rio, S. Paulo and Bahia the excess of the production of onions, eabbages, fruit, etc.

Cattle begin to be exported. Until now it was hardly enough for the xarqueadas (factories of xarque « dried salted beef»), the hides and residuums to the European industries. As to the sheep industry, properly said, Rio Grande do Sul is the most advanced State, though the sheep are not so good there as of other places like Lages, Campos Novos, Curitybanos and others of the northern neighboring State. As to cattle the Santa Catharina ox is stouter and heavier having an average of 30 kilos more than the Rio Grande one.

If we are not mistaken, however, both of them come from the same origin, the iberic eattle. We refer to the wild eattle because the product of recent crossing breed are from fine breeds that lately have been introduced in Santa Catharina and Rio Grande.

Horses are also a source of wealth for Rio Grande, and the products of horse breeding are the best of all Brazil. They are not hor-

ses of fine lines, tall ones, but of middle height, humble aspect, of great resistance to fatigue and of strong muscle.

For the military service, campaigns and marches through the roads, they are used by the Brazilian army in preference to the horses imported from the River Plate and Europe.

It comes from the Portuguese «Alemtejo» province horses, introduced in Rio Grande by the Portuguese, its first colonists, to whom is due the country trucks, certain stories and popular legends, as well as the goats, dogs, sheep and other domestic animals to-day already modified and altered in Brazil.

With such agricultural elements and dairy industries it is easily seen that this State must maintain an active work of exchange with the remittance of its surplus to the markets of other places of Brazil and abroad, receiving from them what it lacks.

The exports and imports of Rio Grande is made not only through these three large markets, Porto-Alegre, Pelotas and Rio Grande, but by the southern frontiers and those of Santa Catharina. There are no statisties to be depended upon, as to the volume of its interstate interchange, but there are some data as to the external commerce.

About these the statistics show an importation much above the exports. Thus is that in 1901, Rio Grande do Sul imported (only from January to November) goods with the value of 20.198:226\$000. and did not export over 12.129:076\$000.

According to the local statistics, the State has exported both for home and foreign markets goods with the following values from 1897 to 1903:

Years					Official value
1897.					52.936:225\$000
1898.					52.583:129\$000
1899.					54.096:800\$000
1900.					50.034:171\$000
1901.					54.128:912\$000
1902.					51.492:487\$000
1905.	٠		٠		55.113:300\$000

The exports of dried salted beef during the same period corresponds to the total of heads killed in the Pelotas, Bagé, Quarahy and other xarqueadas (dried salted beef factories).

Years				N	umber of heads
1897-1898.					374.901
1898-1899.					287.366
1899-1900.			÷		297.690
1900-1901.					364.902
1901-1902.					472.378

RIO GRANDE CITIES. — After Porto Alegre, the richest and more advanced city of the State is Pelotas, which by the last census has 24,000 inhabitants. Adding, however, the population of the other localities of the municipium (of which it is the seat) we get the number of 45,000 inhabitants and by the census of 1890 it had but 42,000. The growth here was not so large as in Porto Alegre and Rio Grande.

In fact, placed as it is between these two nucleus of urbane assimilation, one acting as political and industrial capital of the State, the other as its organ of interchange with the exterior, Pelotas, feels its municipium requested by the centrifugal energies of each one of



Pelotas. - View of a part of the city

them, and it is not without a very strong resistance that it succeeds in not declining, in profit of any or both of the two.

Pelotas was made a village in 1830, and a city in December 1835. In 1812 it was but a hamlet.

It is 300 kilometres away from Porto Alegre and 55,5 kilometres from Rio Grande by railway, and by sea only three hours in steamers making ten knots an hour.

It is not a river lined with woods as in the North of Brazil, or even in the marvellons central region. It is a river of low banks, dressed by bushes of light green showing that those are sandy grounds. The river-stream is not a strong one, and its waters are dark in some spots. The low banks allow the plains to be seen, extending beyond covered with canes and bushes.

Here and there we see a *xarquenda* (dried salted beef factory) with its string of smoke, they grow in number as we near Pelotas.

The city is on the left banks of S. Gonçalvo river, not very far where it meets the lake waters. We land on a square by the river, through a wooden quay. The port is filled with small boats. The steamers do not come alongside the quay. To come ashore we hire a boat. Lots of catraciros (boatmen) come alongside the ship as they do in Bahia and other ports. They are generally Portuguese, in the South, while in Pernambueo, Maranhão and Bahia they are negroes and inulatoes. This port is not so frequented neither is it so pretty as Rio Grande. The city streets are wide, straight and long, cut in squares, modern style. The buildings have as a rule one floor as in Rio Grande, having more houses with upper stories than this one.



Pelotas. - View of a Beef Factory

The «15 Novembro» street, is the liveliest of all. It has nice two story buildings, business houses, with nice show-windows, coffee-houses, hotels, etc. At the left we see the new and pretty building—the City Hall—the front of which looks to the Public Garden.—The Public Library, an institute which is the pride of Pelotas is also in that street and it is a model of order and neatness. It has 25,000 volumes.

This aristocratic street pays well for the impression we receive entering the port, as the part of the city near the quay does not awake favorable impressions about the city.

The region from the garden up it compensates this impression. In all the horizon line every side the observer may look to, we see the chimneys emptying rolls of smoke towards the blue sky and this gives at once an idea of the industrial power of Pelotas.

The Public Garden, is of all the public squares, the prettiest and most frequented. Large trees shade its grounds. It is square and has nice bushes, flower-beds, fine plants, benches, lawns, and an artificial grotto.

Among the nice public buildings we will mention the theatre, a large and elegant building; the City Hospital, in certain points superior to the one of the Capital; the pretty railway station; the market in the central part of the city, a stone and lime, one floor building, old style, surrounded by small grocery stores, and with a large door on each side of the building, door that gives access to the internal light yard; the S. Francisco church, heavy building of



Pelotas. - Da Misericordia hospital

colonial architecture, but not altogether of bad appearance, looks to a pretty square, and has a portico with ionic columns and two towers somewhat dark with years. In its interior it has six altars, it is light, as are as a rule all the catholic churches.

The city commerce is quite progressive. There is life in the streets. The newsboys offer the papers for sale. The horse-cars run through the streets. There are many public cabs and carriages, and their hire is not dear. For 3\$000 (about one dollar) they took us from Rua Quinze to *Tablada* (a vast esplanade wherefrom you can see 5 to 6.000 heads of cattle in the pasture. For 2\$000 they go to the Pelotense Park, charming public place due to the initiative of a well known ehemist and druggist.

The city is illuminated by gas. Its streets are paved and the houses are elegant, unlikely many other cities of the country.

RIO GRANDE. — The third eity of Rio Grande do Sul is S. Pedro do Rio Grande. We were there in 1894. In 1903 we had to go there a second time and were quite surprised at the progress the city had undergone. It took good advantage of that decade. Its port has each day more movement. It is a beauty. A well built stone quay, lines the city, and allows middle draught boats to come alongside to load and unload. In the anchorage place we see the transatlantic steamers. All the flags have places in this rendez-vous of international commerce.

Rio Grande city has much enlarged its area and has open splendid straight and wide streets. Its houses, generally one floor ones,



Rio Grande. - Marechal Floriano Street

are modest, but a few public and private buildings are affirming the transformation power of wealth in the physiognomy of the cities of to-day.

Certain streets as General Floriano one, are lined altogether with fine buildings with upper stories and nice architecture. In this street we can see the variety and richness of the Rio Grande commerce. In the evening it is a pleasure to go out for a walk, by the light of the « Auer » gas-light, and look at the dry-goods and dress-makers windows, to see the coffee-houses full of natives and strangers, the billiard-rooms, the breweries, all of these lively and gay as in the cosmopolitan cities.

Public cabs and carriages run here and there in all directions, loaded trucks go and come to and from the quay, and the newsboys cry out the names of the city papers and latest news. And what good papers this city has. Some capitals of State have not in this sense anything that can be compared with it.

Another street of much life and more so during the day time is the Riachuelo street, a long boulevard alongside the port, paved with stone blocks filled with houses with upper stories on one side as the other is the quay. There is the Custom-House, the dome of which can be seen above the roof of the other houses.



Rio Grande. - Municipality's Square

There are quite a few other wide and well paved streets as Vinte e Quatro de Maio and others.

Several public squares have gardens and works of ornamental art. As soon as we reach the city we see a garden in front of the Post Office. In it is a column, a monument to commemorate the freedom of the slaves, which, we believe to be the only monument in Brazil creeted to celebrate this great national date. That very public garden has a large fountain of great effect among the decorative vegetation that surrounds it.

Another most beautiful square is the one called Tiradentes. It is a new one. It was not there when we paid our first visit to that city. It is a large one, surrounded by railing what neither increases nor diminishes its beauty. Inside is a kind of lake or rather a little river crossed here and there by bridges. Pretty swans populate this thin little thread of water. The lawns and flower beds present a charming display of colors.

At an angle of that beautiful public garden, all surrounded by nice buildings, is the Beneficencia Portugueza, with a rose color front, manueline style, it is the pride of the district. A little farther ahead is the Salvador protestant church, of superb scottish-gothic lines, surrounded by an artistic railing with a kind of a tower.

Once we have spoken of those buildings, we must cite the City Hall, with two pavements and nice front of a sober and classic style. It is one of the best in the State.

The Army Head Quarters is next to that building and is also a fine two floor building, and looks to the garden of the square. It is a noble building with but little ornamentation.

The church is a solid piece of heavy architecture, two towers and a front with windows, of a type so common in the churches built in the eighteenth century. Gomes Freire in 1755 ordered it to be erected on the foundation of the primitive church which had been destroyed by a fire, caused by lightning. Gomes Freire built the front and the main altar and the people built the rest.

The old church was then away from the village.

There were then two chapels, the Sant'Anna one, half a league away, and the Lapa, a wooden one.

Besides the Matriz church and several others the city has the Bomfim ehurch, new in style and construction, all white as an expression of purity.

Few institutions honor so much a city as the Rio Grandense Library does. It is supported by an association of lovers of literature. It is admired by all the visitors. It is installed in a large though one floor building, owned by the association. It has large halls for reading rooms and 30,000 volumes. When we visited it, we noticed among the frequenters a number of privates and petty officers of the army, and we were glad to see them there at night, employing the best way they could have done their leisure hours.

In Rio Grande, as in Porto Alegre and Pelotas, several nice papers are published, of large size, modern features. There are two morning and four afternoon newspapers. Of the morning ones the Diario do Rio Grande is the oldest of the State and excepting Jornal do Commercio of Rio de Janeiro, it is the oldest in all Brazil. The « Artista » one of the afternoon papers has no less than 12 years of minterrupted publication. The Rio Grande city is a city of much future. By the census of 1890 its population was 16.000 inhabitants. The last census gives it 22.000 not counting the suburbs (Porto Novo, Trahim and Mangueira). With those would present at least 30.000. The city is on the bank of the channel formed by the

ocean about 12 kilometres away from the bar, and 330 kilometres away from the Capital. It is built on a sandy and quite plain peninsula.

Were it not for the port, we could not understand how man should have selected such a centre of threatning sands to build a city on. To be sure, an irrational and blind force presides the birth of cities in this continent. Those who see Rio Grande for the first time cannot help but think of the possibility of giving in or rather of being smothered by those mountains of fine sand which surround it on all sides.

S. José do Norte. — Is a small eity in front of the preceding one. This one and Rio Grande form, each one on its side the eanal where the Lagôa dos Patos empties itself into the Atlantic ocean. Its soil is very sandy but it is very good for the cultivation of potatoes, tomatoes and onions, of which it exports to Santos.

URUGUAYANA. — Is one of the good eities of the Rio Grande State. It has 13.638 inhabitants by the eensus of 1900. It is on the bank of an enormous river — the Uruguay. In front of it is the Argentine village *Restauracion*. The Commerce of Uruguayana grows very much just because it is in the frontier. It developed a good deal after the inauguration of the railway connecting it with Alegrete.

Soon we will be able to travel by railway between this city and the Capital, that is, 710 kilometres. The best buildings of Uruguayana are: the Custom-House, the Carlos Gomes theatre, the large Matriz Church, the City Hall, the municipium Public School and the Federal garrison barracks.

BAGÉ. — This is a most picturesque eity. It is bathed by a modest little river, after which the eity was named. It is the most important city of the interior because of its location, because of its commerce and industry. Its main buildings are: The Charity Hospital in one of the suburbs, the Beneficeneia Portugueza, the Beneficeneia Italiana, the Matriz church, the City Hall, a beautiful theatre, the Nossa Senhora da Conceição church, the large barracks, the market, and the pretty railway Station.

Bagé was a hamlet in 1846, became a village in the same year, and city by law of 15 th December 1859.

It is 528 kilometres away from the Capital and has 13.463 inhabitants by the last census.

Sant'Anna do Livramento. — Is at the west side of Bagé. It is curious because it is the frontier more connected with a foreign nation. It suffices to say that only one street separates it from the

neighboring Uruguay republic, the houses on one side belonging to the Brazilian city and those of the opposite side belonging to Rivera an Oriental or Uruguayan city. During the constant civil wars in Uruguay, *Livramento* justifies clearly its name, freeing the refugees from the violences they would suffer if they couldn't escape so easily to a neuter territory.

They say that the hills are very rich in minerals, quite easy to be exploited but remain intact.

It has a good commerce and the dairy industry is well developed. Among its best buildings we eite: the City, the Matriz church, the Barraeks, the Charity Hospital and the Theatre.

It was a hamlet in 1848, became a village in 1857 and city in 1876. It is 701 kilometres away from the Capital and 225 kilometres away from D. Pedrito.

Cruz Alta. — It is a city of about 5.000 inhabitants. It is 500 kilometres away from Porto Alegre. It is centrally located and is the seat of a municipium very rich of *matte* (Brazilian tea). It was but a village in 1850 and there were not over 60 houses, but to-day there are over 200 for a population of 4.909 inhabitants. The buildings worth noting are: the City Hall, the Jail, the Railway station of the road connecting it with Porto Alegre, the Carlos Gomes theatre, the Matriz church, in which they are working and have been doing it for the last 40 years, the Municipal School, the cemetery and a public fountain.

Built on a high hill, we can observe from there the most beautiful panoramas.

Its climate is unexcelled as to health, and it suffices to say that weeks go by without one single death occurring.

Two newspapers of small size are published there.

S. Gabriel. — It is difficult to find a more picturesque small city than this one. It is on the left bank of a river — the Vaccacahy. It is a city with relative good commerce and a lively one and besides the river has a railway.

It is the military centre of the State, and is served by the Estrada de Ferro Porto Alegre to Uruguayana (railway) that has a branch line going there. It has 8.093 inhabitants.

It became city in 1859.

It is 507 kilometres away from Porto Alegre by railway.

Its principal buildings are: the City Hall, the Matriz Church, the Barracks and others of smaller importance.

Alegrete. — A pretty city with 11.438 inhabitants by a recent

official census. It is on a hill on the left bank of the Ibirapuytam river.

Its principal buildings are: the City Hall, the Matriz church, the Charity Hospital, the Federal troops barracks, and the Porto Alegre to Urugayana railway station.

This city owes its origin to the Marquis de Algrete who in 1817 ordered a church to be built on the banks of the Ibirapuytam with the name of Nossa Senhora da Apparecida.

Alegrete has two newspapers, hotels, wine distilleries, breweries and other factories.

S. LEOPOLDO. — It is one of the prettiest cities of Rio Grande. It used to be an old European colony. It has a population of 11.015 inhabitants. It has wide and straight streets, carefully clean. There is no great movement in the city, especially to those who go from Porto Allegre, to which it is connected by one hour railway ride.

It is on the left bank of Sinos river and at the North of the Capital.

It is a calm city. It reminds one of Germany. Its municipium prospers because of its industry and developed agriculture. It has a nice church, the noted Jesuits College, the City Hall, the Kneipp establishment and other nice buildings.

S. Leopoldo owes its origin to a German colony that settled there in 1824. It is a city since 1864 and is 33 kilometres away from the Capital.

Its fame comes from an excellent high school — the S. Leopold College — directed by some Jesuits and which was constituted an educational centre for the children of the wealthy families of these southern States.

S. Luiz de Mostardas. — It is an interesting village, placed on the sandy sea-coast, which is seen by those travelling in the South, near the Rio Grande de Sul coast. There is no traveller who doesn't know this Mostardas sea-shore. The village is behind the sand banks, seen from afar, looking like a flat shore. S. Moreira Alves — a Brazilian writer — says about this place: «After passing by Solidão, S. Simão, etc., after crossing enormous sand-banks that are to be seen all along the coast of this State, how surprised will not the traveller be, when he sees, far away, very far away, the tower of the Mostardas church?

JAGUARÃO. — It is a small city in front of Artigas, of the Oriental Republic, having 9.000 inhabitants.

Among its public buildings it has: the City Hospital, small but

neat and in hygienic conditions, the Military Hospital, the Matriz church, etc. In the central part of Jaguarão we see a pretty square with a garden. The two clubs — the Jaguarense and Quinze de Novembro are the animation points in the small city.

Jaguarão was a hamlet in 1813, it became a village in 1832 and city in 1855.

It is 470 kilometres away from Porto Alegre.

Many other villages and cities are growing up settled by the rivers. The Rio Grande is the only State that has its territory evenly filled with villages and cities. It has no large tracts of empty lands. The civilisation work impelled by the governments and hastened by European colonies goes ahead every day. Industry grows, business develops. Rio Grande do Sul is destined to play an important role among the other States.

THE STATE OF MINAS GERAES

Minas is the medulla (or marrow bone) of Brazil. It is its heart not only in a geographical or material sense, but because the most energetic characteristics of nationality are there crystalised as well as its faults and its best virtues.

Thus Minas is a miniature of the great fatherland. It is as if hidden by its proper mountains. Of all the other most important States is the only one having no maritime boundary lines. We might say that it selected this location in the interior of the continent to keep better the enormous treasures hidden in its bosom.

Of all the American countries, only five — United States, Mexico, Argentine, Peru, Colombia — have a total population superior to the one of this Brazilian province.

What has originated these advantages, as we must attribute to each fact a cause?

The elimate? The excellency of its waters? The wealth of the territory?

All those factors together? It is most probably that. In fact there is not a tract of Brazilian land disputing to the valleys and hills of Minas the reputation given to this State by natives and foreigners. It is a place worthy of being the first residence of man, as it was idealized by biblic poetry.

In the State of Minas what doesn't hide gold, contains iron; what

does not contain coal, spreads diamonds; — in a word, Minas has a treasury in every inch of ground in all its rich territory.

The physiognomy of the ground is very complex and hetereogeneous. It suffices to look to a map of that region.

The northern part of the State, the widest, is visibly inclined towards the valley of São Francisco, not as a plain, but inclined, filled with hills, now dispersed, by and bye in groups.

The south-east part more crossed by roads, in spite of the hills, in



Dr. João Pinheiro. - Governor of the State of Minas Geraes

continuous chains and irregular tops, presents itself more crowded with cities. The best cities of Minas are to be found there.

In olden times, in the ages of difficulties, when there were no means of transportation but animal backs and the trucks pulled by oxen, Minas Geraes saw gathering in the valleys of its hills a race that tore its stony bosom, removing earth and stone in such quantities that after centuries had clapsed they could see with wonder the ruins of such work.

Eighty thousand miners tired themselves to death in a task of 100 years duration hunting the hidden veins, under the mountains.

Thousands of kilos of pure gold were torn from the hard quartz and sent to Lisbon.

The kings of Portugal received gold in abundance, enough to get satisfied, but they never satiated their thirst for gold. Only one of them, João V, received from the inexhaustible bosom of Minas according to an historian: « 130.000.000 crusados, 100,000 gold coins, 315 silver marcos, 24,500 gold marcos, 8.500 kilos gold dust, 390 oitavos gold weight and 40 milfion crusados diamonds, not including the product of the taxes in the value of one fifth of all the gold produced!»

According to a calculation made by the Barão de Eschewege, in front of official documents « the quantity of diamonds taken from



Bello Horizonte. - Paraopeba Avenue

Minas Geraes until 1822 was 165.760 3/4 eighths, and it can be assured that the smnggled portion amounts to as much as this. »

The whole province was like a gallery, a vast underground one, where at the sound of the tools, free men and slaves. in the same dust, the same pains, had to live that ungrateful life, at the king's governors' services as well as of any man with the slightest portion of power. « Generally at that time Minas Geraes was a vast conquest, simultaneously explored by all ranks of dominators, from the king, our master, until the humblest of soldiers. To devour the prize without rest or commiseration, such was the common object, and in that voracious anxiety it was not strange that one should invade the ground of his neighbor, and sometimes even the governors would penetrate the king's dominions. When not even the king was respected imagine how the people were robbed, the poor people, without any guarantees of rights, burdened with work, duties, tributes, without a right to enter complaints, mute, day and night always terrorized. »

To-day the gold is not mined by the king but by the industry man, the private owner who can and wants to explore it. That territory half hidden, among the hills, is the open shop for all the exiles of the fortune, health and politics: to the first, turns into gold and diamonds, as the safe of a millionaire at description; for the seconds, opens the 100 marvels of spring waters; and to the latter, the safety of a refuge twice advantageons; for the peculiarities of the vast soil and the system of laws and public customs having tolerance as a basis as well as firmness and seriousness,



Bello Horizonte. - Building of Economic bank and Treasury Delegation

* * *

It is singular. This populated territory of Brazil, notwithstanding its density of population of 5,9 per square kilometre, when the general average is of not more than 2,1, has no large eity. The eities of 50,000 and upwards are in States far less important than Minas Geraes. None of the Brazilian eities having over 100,000 belong to Minas.

But, the best cities in Minas are not the most populated ones, neither the most populated are the oldest. Ouro Preto, the famous Villa Riea of former times, was until lately the Capital of the powerful State, which is worth by itself, a respectable nation. Well, Ouro Preto, as a Capital was a deception for the visitor. Placed in the mountains it was a city without level, it looked more like a hidden place for animals than residence for men.

To be sure the selection of such place was justified when they did it, because of the wealth of the place and that can be seen in the document of its installation. «.... supposed that did not find convenient place, taking in consideration the wealth promised by the mines worked in these hills, the principal part of these mines.... it is resolved so to execute » What profits came out of that selection? Due perhaps to that improper localisation, Ouro Preto never had the appearance of a Capital, as either of the ex-province or of the State deserved.

The State constitution having prescribed the removal of the Capital to a place that detailed studies should determine, President Affonso Penna charged the Civil Engineer Aarão Reis, to plan and build a new Capital.

On the 1st of March 1894 Dr. Aarão Reis installed himself in the unsheltered hamlet called *Curral d'El-rey*, the old name of Bello Horizonte, and with a large committee undertook the work. First of all a branch line of 14 kilometres track for a railway connecting the place with the Central of Brazil railroad had to be built.

The works began with such an activity that on the 4th of November of the next year licenses were given for private houses to be built. It is necessary to note that this was a mere little place a hamlet, and everything had to be done to make up the city that is there to-day.

The natives of Minas Geraes spent with the construction of the new Capital, including the branch railway to Bello Horizonte, 33.073:000\$000. Of this 29.536:000\$135 was treasury money and revenue collected by the building committee from the sale of grounds 3.537:000\$269. Of this total we must deduct 2.800:000\$000, amount for which the State sold to the Union the branch railway line, and 2.000:000\$000 amount spent with the building of houses of officials and public employees and which are mortgage to the State. When we visited Bello Horizonte for the first time in 1903, it was already finished and in full period of enlargement. We were glad of it, as they had informed me of the Contrary.

After crossing the 600 kilometres of railway that connects this eity to Rio de Janeiro, at ten o'clock on a nice bright and sunny day, we arrived at the entrance of the branch line leading to the city, the station of which is of original architecture, immediately indicating

that we are going to see new things, It is like the advertisement or poster in stone and lime about the next performance to appear.

From this station called General Carneiro, to Bello Horizonte is but half an hour railway ride and we enter the new Capital by a pretty portico which is the Minas station. This is an ample building with a white tower reminding us of middle age times. This tower elevates itself above the houses with a four dial clock.

The station looks to a large square just finishing its garden built by Mayor Bressane when we visited that city. From the tower we



Bello Horizonte. - Minas Station, of the Estrada de Ferro Central

can see a fine picture. What an excellent selection of a place for a city of peace and liberty!

The whole eity seems to rock itself in the balsamic breeze that softly blows suspense between the surrounding mountains as a web of light. Its streets run straight towards the green of the hills, with that eternal beauty of order, and so large, so symetrie as if they had to let go through, all the people of this world together. These streets are lined by new and graceful buildings which are being constructed here and there.

Dominating them, under an enormous terrace that is like the head of the city, we distinguish, lining the square, the white and rose color buildings, the Government palaces and several Depart-

ments of the Administration. Coming down from there to the limit of the buildings, we see the bulky mass of light yellow of the police barracks, in a position of sentry of the city. In the centre of this in a valley of a little river called Arradas, the engineers made a park quite wide and artistic. This was an idea applauded by all visitors, for the way all curves of the river and accidences of the ground were taken advantage of to bring out in relief the garden.

A street wider than all the others, the Affonso Penna Avenue, divides into sections from one end to the other, in two equal parts, all the built region, and with its symetric rows of magnolias go to the meeting of the mountain sides which gave name to the old hamlet, the Curral d'El-Rey mountain.



A defile of the Serra do Curral on the way to Ouro Preto

The topography of the place where Bello Horizonte is slowly accidented composing itself of the valley where the primitive hamlet was born and died, and some hills, and sourrounding mountain base. There engineering was previously engaged in correcting nature, filling in grounds, opening places, softening the rough parts of it without giving it the monotony of a plain without contrasts.

This way Bello Horizonte has the physiognomy of just centre among the hilly eities and plain ones sharing of the advantages of both these types, without the exaggerations of any exclusivism in one sense or other.

The city is more or less in the altitude of S. Paulo city or Curityba, some 800 metres above the see-level. But Curityba with its European cold, S. Paulo with its sudden changes of temperature cannot give an idea of the mild and unexpected climate of Bello Horizonte.

As to the public services they are splendid. The arborisation the most rational and the most artistic of any South American city. The sewage, the water supply, the illumination, the electric tramways everything corresponds to the idea of a modern Capital.

The arborisation about which we cannot say too much is a marvel. The whole city gives us the impression of a large garden.

At night the city is melancholic. It goes to sleep very early, as it is convenient for a new city really so young. The illumination is not profuse. It is far from that brightness of Manáos and even certain streets in S. Paulo.



Bello Horizonte. - Senate-House

Only in Bahia street all lined with business houses, we notice some life up to ten o'clock at night, crowds of loungers and now and then a carriage going by.

After that hour the tramways become scarce, the crowds are dispersed, hardly one or other remains in the streets and even Bahia street is wrapped in complete silence as if it were at sound sleep. The other streets look like the cloisters of a convent, with suspended lamps, here and there. If it rains there is one more element to put the city to sleep early. The streets that are not paved have a kind of reddish surface which does not absorb as quickly as it receives the rainy water and makes a kind of sticky and disagreea-

ble mid sticking to the shoes of those who have to go through. Luckily the tramways and public earriages save the situation.

Excepting S. Paulo, no State has at present a better or more complete official installation than this city.

The Palaees of the Government, Secretary of Interior, Agricultural Department etc, occupy a large square in Liberdade square. The first one with its small park looks to the front of the square entirely dominating it.

It is an imposing building, with three fronts, the main one looking to the square being of a most beautiful effect. It is all of stone with a bust of the Republic,

It has two stories. The ground one has the vestibule, the barracks for the guard. The upper story, the noble Hall in front, dining-room, library, office, private appartments of the governor, and side galleries in form of towers, round ones, with 7 metres diameter, surrounded by seven windows decorated by columns of ionic style (faney work) and roof in half-sphere form with oil paintings decorations. It occupies a surface of 1.898 square metres, with 36,50 metres front, 52 depth, and 20,50 height.

An ample marble stairway leads the way up. It is a piece of artistic work.

The walls are decorated, the ceiling has the allegory to Liberty, Order, Fraternity and Progress, and the whole is fine work in colors and gold.

They told us that this building cost the State government about 1.400:000\$000. It was well spent money. It is the first building of its kind in all the States. The Palaces of the Government of S. Paulo, Petropolis, Bahia, which are new and large cannot be compared with it. Those of Florianopolis, Maceió and Curityba are new but have not that size. Those of Belem and Recife are large but heavy, ungraeeful Portuguese colonial style, strong but ugly.

The President or Governor of the Minas State is Dr. Joãs Pinheiro, one of the most noted of public men of the country. He is a captain of industry, very elever and active, he is a lawyer and literary man. He was elected by unanimous vote to the dignity of governor. He has held other official positions. He has been a member of the State Congress and Federal Senator, always acting with good judgment and devoted to his duties. He is a young man of progressive ideas and strong initiatives.

In the same square where is the Governor's palace is the Palace of the Interior, a large building with three floors.

Leaving the Liberty Square at the side of this building is the

Finance Department, large and imposing, three floors, three bodies on a small stairway. The ground floor is of doric style and those above are corinthian style.

The three bodies of the building, painted rose color are disposed in such a way that the centre is a little inside. The stairway in this as well as in the other building rests on an iron frame, with artistic supporters of beautiful effect. Inside it is decorated in a sober style, but of good taste. It cost 853:073\$000 and that of the Interior about 900:000\$000.

On the opposite side to the Governor's Palace is the Agricultu-



Bello Horizonte. — Governor's Palace

ral Department, a little similar in its general lines to the one I just mentioned but in details obeys to the Toscane style and it is pleasant. Like the other has in its front, three distinct bodies with the centre one a little in. Like the other it also has three payements.

It has on the first floor, two windows on each of the side bodies. In the central body is a wide iron door of pretty and of artistic design, with two smaller and narrow doors also of iron at the sides. On the second floor are two windows on the side bodies and five in the centre one. On the third floor, five in the centre, one on the sides. In the side bodies of the building are in relief the initials S. A.

It is on the ground floor of that pretty building that the City Hall of Bello Horizonte is provisionally installed.

There we saw beautiful oil paintings representing views of that place in olden times, the seed of the great city.

Other buildings worth looking at are the Barracks of the Police Force. Its front measures 112 m. 50 length. It has five different bodies. The central one has 28 metres and 15 m. height, two side ones are lower and two are towers at the extremities. On the ground floor at the left is the eavalry squadron and at the right the 1st company of the 1st infantry battalion. In the centre is the major staff and general headquarters, the guard rooms and jail and storage rooms.



Bello Horizonte. - Home department and Revenue

On the superior pavement are the rooms and offices of the commander and secretaries, etc.

The stables are at the rear. We visited them with interest and found them in fine order.

Next to this barracks is a target firing establishment. Both civilians and military men can practise shooting there.

A little before the barracks is Santa Ephigenia church a pretty church of gothic style.

The City Hospital is a beautiful building though not so large as the Pará, Reeife, or Bahia ones and much less than the Rio de Janeiro one. It is a building of a fancy architecture, a mixture of the gothic and classical hellenic styles. The main entrance is of stone. The front has a ground 120 metres long. At the side in different plans forming wings are vast wards eight by thirty metres. Inside is well ventilated with curved ceilings and large windows.

The central building has an upper story and has a very large door where are going to be installed the chemistry laboratory, storage rooms, and employers rooms.

The Bello Horizonte market has a severe aspect. Its front has



Bello Horizonte. — Agriculture Palace

42 metres length by four width, and two side, wings measuring 22 metres by four each.

In its front which looks to the Quatorze de Fevereiro square are two pretty towers 13 metres high by four length and by four width placed at the extremities.

The building which cost 200:000\$000 is covered with metal and surrounded by a sidewalk two metres wide, protected by an extended roof. The floor is cimented.

We must also mention: the fine church, Flemish style, called

« Sagrado Coração de Jesus; the Gymnasio Mineiro in a fine building near the Interior Department; the Law College, a fine building; the Federal Treasury Department Branch and Government Savings Bank, with its front in Scottish style without symetry but of beautiful effect; the Senate a large building but of little architectonic value; the State Congress; the Police Department, a most elegant and appropriated building; the Official Printing Office of aristocratic side, but without decoration; the Grand Hotel at the eorner of two large streets, painted rose color and last but not the least the Matriz church now being finished — S. José—design of the



Bello Horizonte. - Barracks of the Public Force

Brazilian architect Nascentes Coelho. It is of modern manueline style, 30 metres by 60 and the central tower 40 metres high up to the cross.

* *

Public Instruction, Transportation, Commerce. — Minas Geraes recently presented the following about its schools statistics: From 530 districts: number of pupils 52.655 being 31.501 males and 21.154 females. Yet there are 17.713 male children and 14.643 female ones, or a total of 32.356 children who do not receive any instruction. Receive instruction in State schools 41.918 children, in private nnes, 4.406 and at home 825.

There are in the State 1.501 grammar schools. Of these 488 are in the city and 1.013 in the interior. There are 671 for males, 646 for females and 184 mixed.

During 1903 there were 33.068 pupils registered in the schools, 19.421 males, 13.647 females. The frequentation was thus 13.113, being 7.556 males and 5.557 females.

There is a well known Miner Engineering College in Ouro Preto which renders great services and 15 professional schools in other cities.

In that very city is a magnificent Pharmaey College with 300 pupils which enjoys a very good reputation all over the country. In the Capital the State maintains the Gymnasio Mineiro, Law College, several Normal colleges in interior cities. In Barbabaeena is the Internato do Gymnasio (Boarding Gymnasium) with 100 pupils. It is a model institute. It has a library with 10.000 volumes and in Juiz de Fóra is the Commerce Academy.

We will not forget the Public library recently founded in Bello Horizonte with I5.000 volumes, a good start. At present there are in Minas 51 public libraries distributed by the principal cities. Of Normal colleges we cite: Onro Preto, Sabará, Juiz de Fóra, Campanha, Diamantina, S. João d'El-Rey, Uberaba, Arassuahy and Montes Claros with from 150 to 200 pupils each.

As to railways only one State is superior to Minas — it is S. Paulo.

The railway-net of the State of Minas in 1902 was 3,480 kilometres thus distributed:

Minas railways			Metres	
Leopoldina			842.156	
Oéste de Minas			681.000	
Sapueahy			371.000	
Bahia e Minas			235,800	
Muzambinho	٠		94.895	
Cataguazes			48.180	
João Gomes a Piranga			26.564	
Paraopeba			12.000	2.512k,595
Federal roads			Materia	
reneral roads			Metres	
Central do Brazil			574.592	
Minas e Rio			147.000	
Muzambinho			144.000	
Mogyana		٠	502.000	1.167k.592
Tota	1			3.480k.187

The State of Minas has spent until now with railways: In subsidies: 892:764\$000.

In guarantees of interest 24.162:191\$000 distributed by the following roads:

 Leopoldina.
 8.175:821\$509

 Oéste de Minas
 7.022:954\$165

 Sapucaby
 8.418:521\$745

 Muzambinho
 140:458\$845

 João Gomes a Piranga
 406:455\$674

Total. . 24.162:191\$958

In loans 15.875:412\$051 being:

 Sapucahy
 6.920:000\$000

 Muzambinho
 5.644:412\$051

 Espirito Santo e Minas
 5.511:000\$000

Total. . 15.875:4128051



Bello Horizonte. - Public market

It spent with the E. F. Bahia and Minas (purchase, loan, construction of extension till Theophilo Ottoni, studies till Arassuahy) 16.191:867\$788, Altogether 57.122:235\$777.

The total revenue of these State railways was in 1889, 3.983:990\$482; in 1900, 8.213:057\$312; in 1901, 10.222:688\$247 and in 1902, 13.121:502\$600.

			Metres
To-day the extension of railways in operation is .			5.648.277
Being subsidized or with concession from the State			2.510.685
State concession or property of the Union		٠	1.557.592
Total			7 906 554

There are now in construction 600 kilometres in several lines, concessions from the State and the Union. Only the Central Brazil railway is about to inaugurate 100 kilometres.

Thus by the close of this year 1906 the Minas State will see its railways with an extension of over 4.000 kilometres.

The Police force of the State of Minas is constituted by a Police Brigade composed of 1.600 privates and 100 officers, forming three infantry battalions and a cavalry squadron all under the command of a colonel generally a regular army officer.

The battalions have not an equal number of men. Thus is, that the first has 919 men in the barracks we described above, the second in the city of Uberaba with 310 men, and the third in Diamantina with 350 men. Only the company housed in the Bello Horizonte barracks has a band of music.

The eavalry squadron commanded by a captain has 200 men.

They don't all use the same rifle. They use Comblain, Mauser, Chassepot, etc.

* *

NATURAL WEALTH, INDUSTRIES, MANUFACTURING. — None of the Brazilian States except Bahia disposes of so many natural resources and so valuable as Minas Geraes and none has had so deserving fame of the abundance and excellency of these resources as the layers of the State of Minas.

Gold and diamonds have been for a long time the principal wealth of Brazil. Recently, since some 16 years ago they discovered enormous layers of manganese which were immediately placed under industrial exploitation as they were by the Central Brazil railway road.

In the Northern region of the State they recently discovered layers of precious stones and according to the official paper, it has increased much of late the exploitation of the topaz, the amethyst, the turnaline and other precious stones, which have been largely sought especially in the Bahia markets.

The quantities of gold extracted from Minas Geraes at the time of the Portuguese dominion seem incredible. It suffices to say that in the period from 1700 to 1820 the taxes or duties collected on that metal were 7.137,5 a. with a value of 53.529:750\$000. « The gold extracted during that period amounted to 35.687,5 a. with a value of 267.656:500\$000, falling to the Ouro Preto district 22 %, Sabará 23 %, Marianna 25 % and the balance divided by the other districts. »

From the message of Vice-president Costa Serra we transcribe a

table of gold exported by Minas Geraes with its official value during the years 1896 to 1901:

		Grammes	Reis
1896.		1.988.527	5.597:169\$253
1897.		2.233.214	7.184:685\$764
1898.		5.090.205	10.816:072\$825
1899.		4.192.414	15.682:554\$167
1900.		4.504.688	15.511:518\$555
1901.		4.012.221	10.771;671\$811
Tota	1.	19.821.269	61.165:672\$151



Bello Horizonte. — Front view of the Minas Gymnasium

This does not include the gold-dust exported during the same period.

It is impossible in a book like this one to enter into details of information about the gold-mines being worked now. They are not so few that I might give their list here with details.

Among them, however, there is the Morro Velho, directed by an able mine engineer Mr. Chalmers. This mine has all modern apparatus and tools for its exploitation out of which excellent results have been obtained.

INEXHAUSTIBLE MANGANESE MINES. - As to the exploitation of

manganese oxides we may say that not even $1^{-o}/o$ of the known and discovered layers in this State is contributing towards the fortune of the country, because until now they only are exploiting those by the roads of the railway companies. Yet nothing is more interesting than to look at the activity in the work of those layers as we cross that region in the Central of Brazil trains. From the Laffayete Station on principally in Miguel Burnier we had the opportunity to be present to the shipping of enormous quantities of mineral in freight cars that were to earry it to Rio de Janeiro wherefrom it was to be



Bello Horizonte. - The Law-School

forwarded to Europe or North America. The State of Minas is becoming one of the large exporters of this important element of industry of mineral extraction. These figures indicate the progress it has had.

QUANTITIES OF MANGANESE TRANSPORTED BY THE CENTRAL

	(ЭF	В	RA	Y			
Years								Tons
1900.		٠						92.601
1901.								89.499
1902.								141.543
1905.								185.106
1904.					٠			217.983
1905.								246,000

It is opportune to publish here some remarks made by the *Anvers-Bourse* about the exploitation of manganese in Brazil initiated in Minas with great success:

« The manganese industry in Brazil, still quite recent, as it has only some twelve years of existence, promises to become the most serious competitor of the manganese commerce. If they have delayed exploiting the layers of manganese in Brazil it is because, with the economical crisis consequence of the forced circulation of paper



Minas. - The great Falls of Tombos de Carangola on the frontier of Minas and Rio

money, in this South American Republie, such branch of industry was absolutely onerous.

As it is known manganese is especially used by steel factories, and metallurgic industries are not yet developed in South America. It is, then, exclusively for export that we can base the exploitation of the manganese layers.

The first were discovered in 1888 by an engineer employed in the construction of the Central Railway of Brazil near the Miguel Burnier station (State of Minas Geraes). A Brazilian eapitalist was the first to export manganese to England and the United States and a series of analysis made in those countries showed that the Brazilian mineral contains as an average over $55\,^{\circ}/_{\circ}$ of manganese. Nowhere in the world is a richer mineral of this kind to be found. The Spanish mineral is the one that comes nearer to the Brazilian with an average of $53\,^{\circ}/_{\circ}$ of metal.

Recently new layers of manganese of considerable importance have been discovered in the interior Bahia, and there they have also initiated the exportation of that mineral.

The mineral exported from Greece, Chili, Cuba and France contains $52^{\rm o}/_{\rm o}$ of manganese. After these comes Caucasus with $51^{\rm o}/_{\rm o}$. The Brazilian mineral has also the advantage of not containing phosphorus.

It is not surprising then that under these circumstances the exports of the Brazilian mineral has increased in extraordinary proportions, growing from 6.785 tons in 1895 to over 120.000 tons in 1903 only from the layers of Minas Geraes State.

Brazil furnishes now 350.000 to 400.000 tons of this mineral to the universal market, »

Besides the gold-mines, diamonds, already being exploited, many others, especially diamond ones are being bought in the Northern municipiums, which, as it is expected, will soon be lively centres of exploitation.

Another characteristic of the mineral soil wealth is the value now attached to the reputation of its waters and summer resorts.

They are in large number, those fountains in several States, some with an established reputation, principally the extensive vulcanic basin of Caldas, Lambary, Cambuquira, Caxambu, etc. and many others in larger number but not yet known. Lately there has been a movement of interest about this hydro-mineral extraordinary wealth in the State of Minas.

Several enterprises have been established. The recognizance of value of these waters is being, more rapid and more extensive. A regular propaganda made by these enterprises organizing attractions to the visitors is ealling more people and making these places more valuable, especially Caxambu, to-day known all over the country for its excellent waters.

DAIRY INDUSTRIES. — Another element of wealth in Minas is the Dairy Industry and its respective exports. In the West and North east of this region there are vast fields for eattle raising. In the South, however, this industry is also explored.

Passos eity in the South of Minas is one of the centres of the greatest activity in eattle raising, country fairs are held there every year. It is a beautiful sight the entrance of the cattle to the Passos fair the most lively in the South of Minas.

« This region is excellent for the raising and fattening of the cattle coming from the interior of Minas, Goyaz and Matto Grosso. The surroundings of Passos are the largest contributors to the markets of eattle.

Having also fields for breeding and raising cattle, their contribution to the general production of the State is not small.

The Passos Municipium buys to the people from the interior 35.000 heads of cattle yearly.

These are bought for an average price of 2.100:000\$000. The number of heads raised in the municipium is of about 14.000 representing a gross revenue of about 560:000\$000 annually. The ground reserved for this is 50.000 hectares.

Yet the cattle exports has continually decreased as we see by the table below:

Years					0	xen and cows	Pigs
1897						155.928	22.488
1898			٠			151.648	_
1899	٠	٠		٠		155.239	17.551
1901						127.124	21.171
1902						122.295	19.242

It is because the local consumption is increasing every year in Minas and in the future this State will import instead of exporting cattle.

Meanwhile the dairy industry is increasing.

In several places of the State there are many butter factories, with products of excellent quality exported in large quantities to neighboring States thus diminishing the European importation which brings to the Brazilian markets adulterated products.

To make an idea of the development this industry has had, it is enough to see the exports of butter from Minas to Rio de Janeiro, during 1903 came up to 247.886 kilos.

The total of products of this State exported according to the official value was as follows:

Years							Official value
1897.							180.317:244\$000
1898.							153.300:499\$000
1899.		٠			٠	٠	172.815:752\$000
1900.	٠				٠		180.851:661\$000
1901.						٠	182,560:008\$000
1902.		٠	٠	٠			185.088:772\$400
1903.							202.350:900\$600

After Bahia, Minas Geraes is the Brazilian State presenting today a larger variety of exports. Here is a list of the 25 principal products exported by Minas by the order of its importance in the market:

Coffee, cattle, gold, cheese, tobacco, baeon, fowl, rubber, pigs, manganese, corn milk, cloths, lumber, horses, dry hides, leather, mules, potatoes, diamonds, beans, sugar, brandy, rice, salted skins.

This State as to the variety of its products can be divided into five districts. The most important in relation to the production is the south region, after that the west, then east, centre and north.



Caxambú. - View of a part of the City

Manufacturing industries. — The manufacturing industries are not so varied in Minas as it is in Rio Grande do Sul, Rio de Janeiro or São Paulo. There are however, a large number of good factories, some of them as good as the best in the country. We mean the iron works.

One is the Esperança on the left of the Central of Brazil railway going to Bello Horizonte in a low place belonging to Itabira eity. There is a group of houses dominated by a chimney. The grounds of the Esperança factory cover a surface of 10.869.152 square metres and the mineral has a wealth of 65 to 69 % metallic iron.

The factory not only sends iron to the market but manufactures goods as grates, tubes, rods, axles, wagons, etc.

It is 338 kilometres away from Rio and 18 from Bello Horizonte. Its manager and owner is the young metallurgic engineer Dr. Queiroz, a Brazilian who has improved these works very much. This factory supplies the iron for the wheels made in the workshops of the Central of Brazil Railway.

There is near the same Central road another iron factory known by the name of Wigg Factory, founded by the Brazilian engineer Dr. Wigg the inventor of the first blast-furnace to prepare iron in Brazil.

While we travelled through Minas we heard many complains, quite just, from the industrious iron manufacturers against the heavy taxes imposed by the State government on an industry which is beginning.

« The products » said Mr. Wigg, « either from this factory or that other that I have suddenly established under the name of Wigg are to-day overtaxed by the State most unjustly. »

It was in Minas, in a place called Morro do Pilar that they founded the first iron factory in Brazil.

The cotton mills are to be found in several cities of the interior, and import large quantities of cotton from the North, while Minas could well cultivate and develop that product. There are also many butter and cheese factories, the principal market for which is Rio where the products have made a reputation putting out Europe and Argentine.

One of the most noted factories of the country for the excellence of its products is one of Dr. João Pinheiro exporting all kinds of sanitary crockery in nothing inferior to the French and English one.

There are also breweries, soap, candles, hats, shoes, food factories and others existing in nearly all the cities of the State of Minas.

An official document published the following list of these factories in 1903:

FACTORIES AND WORKS IN THE STATE OF MINAS

Coffee factories , . 1.073	Farms	417
Sugar cane works 2.854	Tanning	70
» » animal traction . 10.380	Gold	15
Mills	lron	61
Mandioca factory 966	Diamond	3
Rice factory		96
Butter		13

Bricks					1.133	Breweries					66
Furniture					303	Taylors.			,		671
lron					122	Shoes .					617
Threading mill					22	Saddlery					374
Printing office	٠				140	Carriages					12
Bakers					556						

There were also 19,590 coffee farms, with 118.544:000 plants which produced in 1903, 8.138:000 arrobas (one arrobe is 15 kilos, about 30 pounds.); 5.832 farms of tobacco; 9.880 farms for raising pigs. 5.960 for dairy industries; 7.628 sugar cane; 26.682, grain; 846 fruit; 150 vines and many small ones.





Ouro Preto to-day. — Monument of Tiradentes in the Square of the same name, and the old prison (rebuilt)

Other cities of the State. — In spite of its large population which to-day must be 4,000,000 inhabitants, (by the census of 1900 showed 3.594,471) the State has no large city with over 50,000 inhabitants. It has, however, among its 117 cities, about six, at least, that could be capitals of States by the activity of their commerce and industrial progress, and material development and culture.

Ouro Preto. — An old city, a peaceful one. Its streets and houses, seem to be rolling on Villa Rica mountain where its founders placed it 1.200 metres above sea-level.

It is connected with Rio by the Central of Brazil Railway. In its six squares is everything there is in the horizontal plan, but the 52 streets and lanes, go through tortuous and accidented places as if they were acrobats.

The following words written by a writer who visited many Brazilian cities, show well the impression of the newly arrived contemplating the historical city of Ouro Preto:

«Entering the eity, I uncovered myself, as a sign of respect



Ouro Preto to-day. - S. José Street and the « casa dos contos » on the back-ground

for its glorious traditions. Its melaneholic aspect the hills upon which it is built, its immense district of houses, quite old, the towers of the many churches, the mountains, at one side the great bloc Itacolumi, all those historical buildings, all that produced in my mind an impression of respect and love for that legendary city.»

Are interesting as antiquities from colonial times, its churches, very large ones, without any graceful architecture; the Santo Antonio Asylum, the Mineiro College; the school of Mines; the Ouro Preto Gymnasium, the Normal College, the Pharmacy College; and others.

We see among the buildings of Portuguese origin the one used as Treasury before the Capital was transferred to Bello Horizonte, at the end of Tiradentes street. Large building, two floors, and used to be known as *Casa dos contos* and at the time Ouro Preto was the metropolis as Casa do Real contracto de entradas.



Old Ouro Preto. - The Thomas Gonzago house, in the middle of the 18th Century

In a parlor of the ground floor under the main stairway was once arrested the poet Claudio Manoel, some day they found him hanging. Some say he committed suicide other say he was murdered. The truth will probably never be known.

The honse where Marilia de Direen died, modest and ugly building, notwithstanding the poet calling it a palaee, is yet in good condition. It is a low building surrounded with windows. Every visitor of Ouro Preto must try to know it and to do it, he needs but to follow

the itinerary indicated in the following verses written by the poet bimself.

Toma de Minas a estrada Na Igreja nova, que fica Ao direito lado, e segue Sempre firme a Villa-Riea.

Entra nessa grande terru, Passa uma formosa ponte, Passa segunda, a terceira, Tem um palacio defronte.

Elle tem ao pé da porta Uma rasgada janella : E' da sala, aonde assiste A minha marilia bella.

(Take the Minas road at the place known as *Igreja Nova* (new churh) on the right and follow straight to Villa-Rica. Enter that great land, go over a beautiful bridge, go over the second, the third and there is a palace in front. It has near the door a quite wide window, the parlor one, where my beautiful Marilia is.)



Old Ouro Preto. — Architectomic fountain in the 18th Century, leaned against the Marilia House

In the same district — Antonio Dias — the visitor can see the house where the poet lived and that was his own. It is in Claudio Street (called Ouvidor Street in the XVIII century) in front of the old market. It is a two floor building, a very large one, but not an elegant one. At that time it was one of the best in the city. As the street is inclined, the front of the house has one side taller than the other, but the building is in good conditions as yet.

Ouro Preto has, besides these historic precious relies, a magnificent monument erected in 1894 in honor of Tiradentes, and which is one of the prettiest of its kind in Brazil. It is of stone and constituted by a tall obelise with bronze decorations with the statue



Old Ouro Preto. - The house where Marilia de Dirceu died

of the Martyr Tiradentes on top measuring 2^m80 height, the whole monument measuring 19 metres.

Besides these, there are yet other buildings of great historical and archiological interest. They give a poetical physiognomy to the glorious ex-Villa Rica: undestructible bridges, old churches, fountains, cyclopic ruins of extinct mining. Of the fountains, it is worth mentioning the one near the garden of Marilia's house, because of its architectonic drawing and ornamental drawings of which we distinguish four faces, in stone.

The city had 11,116 inhabitants in the two districts, Ouro Preto and S. Gonçalo do Monte (census taken in 1892.) Including, however, all the districts of the municipium of Ouro Preto its population is 65.383 inhabitants. It was founded in 1698, we might say on gold

ground. It was the Capital of Minas till 1897. With Sabará and Marianna completed the name of the three first villages created in the Minas Geraes territory in the year 1711. It was during two centuries the historical centre of Minas «the greatest centre of work and wealth of all the Brazil-colony, better known and spoken of in Portugal than Rio de Janeiro the seat of the sub-kingdom of Portuguese America».

Now, without the honors of Capital, is like a mother that has survived her children — sad and alone completely sunk in her thoughts and the echo of her traditions.



Juiz de Fóra. - Jury-House and Public Prison

Onro Preto has electrical illumination, water supply, newspapers, a mining Academy, good schools, hotels, city hospital, etc., libraries, several factories, and now is being gradually transformed into a progressive city, especially after the inauguration of its railway, a branch of the Central of Brazil Railway.

Juiz de Fóra. — It is the most important city of the Matta region, connected with Rio by the Central railway. It has also the Pian railway starting from there. It is an industrial city, illuminated by electricity and having a lively commerce, water supply, etc.

Among its factories we will mention: the Mascarenhas threading mill in a building with 42 windows in the main front and a fine chimney, the furniture factory, a first class one, making fashionable furniture of Brazilian woods; the nail factory producing three tons of nails a day; the Mechanica Mineira, occupying 7.800 square metres, produces iron works (east iron), wagons, agriculturae implements, inaugurated in 1890; a shoe factory founded in 1893, produces and exports shoes for the whole North of Minas; Empreza. Industrial is also a recent installation with improved machinery, it is a brick and tile factory, the building occupying an area of 1.600 square kilometres; the Construcção Mineira, an enterprise of city and rural buildings and other factories of smaller importance.

Juiz de Fóra has large public and private buildings as the Banco de Credito Real, the Commerce Academy, the C. Andrade & Co's palace, the large building where the Jury meets, having the jail in



Juiz de Fóra - Textile Fabric « Mascarenhas »

the rear, and many others. It has newspapers, hotels, telegraph, clubs, etc. Its population was 22.586 by the 1892 census, 12.134 males and 10.452 females. To-day it has 38.000 inhabitants (1902 census.)

UBERABA. — It is the princess of the Minas triangle. It is the head of the district and destined to a great future when the Mogyana railway will extend its tracks to Goyaz. It is the seat of the Goyaz diocese, and there is the 2nd battalion of the State. It has a normal college and 20 grammar schools, three newspapers, breweries, eigar factories, cotton mills, soap factories, etc.

Its population is about 30.000 inhabitants including the districts of Uberabinha, Alagôas, and Campo Formoso, that are located at its sides. The Matriz Church (Cathedral of Goyaz diocese) is a large beautiful church, gothic style, design and plans of Ataliba Valle, a Brazilian architect, its front presents a homogeneous whole with

the central section which opens in a portico upon the stairway and prolongs itself towerlike to a height of 30 metres ending by an octogonal pyramid. A chronometric clock is placed in the front of the tower looking towards the wide square in which the church is located. The construction of this church began in 1848 and finished in 1886.

Other nice buildings are:

The City Hall, if not elegant, is a solid building, located by the side of a pretty garden. It was built in 1837 at the expense of the inhabitants. It has two floors and five openings (windows and doors) on each.



Uberaba. — Santa Casa de Misericordia (Hospital)

S. Luiz theatre, large building, has nothing worthy of note as to its architecture, it is located at the Matriz Square and has 600 seats.

Uberabense College, is a long building, on the top of a hill, and is directed by the bishop. It has 100 pupils.

The City Hospital built by an Italian monk, on a hill. It was inaugurated in 1826, large building but without architectonic style.

Nossa Senhora das Dores College large two floor building, inaugurated in 1893, simple architecture, has some boarding pupils and some outsiders, directed by French monks, 300 pupils.

Several clubs and literary and recreation societies animate social life there. We will cite the *Sport Club* that built an elegant race track; the *União Uberabense* maintaining a band and music classes; the *Sociedade Española*, a nice building in a place called Fabricio, on a hill; The *Fratellanza Italiana* with fine building inau-

gurated on September, 20th, 1901; the Gremio Recreativo and others.

Uberaba lately installed electric illumination. It has 87 streets, 17 squares, 4 inclined streets, 1.891 houses, seven eatholic churches, one protestant methodist church.

S. João D'EL-REY. — On the 8th of November 1713 Governor Balthazar da Silveira, a Portuguese, arrived at the Rio das Mortes place and with the usual solemnities elevated to the rank of a



Fberaba. — The municipal House

village changing its name for that of S. João d'El-Rey which it has kept until to-day.

Just like the majority of the colonial cities, in Minas territory, S. João d'El-Rey passed through three periods quite distinct before reaching the present condition. Products of hyperesteny which the discovery of mines stimulated in the first half of the XVIII century they grew up with the riches and the population that sacra-fames-auri crowded in the centre of those mountains. Afterwards when the nurseries and layers exhausted, they went down declining to the position of abandoned cities, dead cells in the nation's orga-

nism, until the time when with the natural evolution of Minas the opening of rapid communications by the appearance of railways began to reanimate, and that is the third phase of that cycle — called gradually again to that commercial and industrial movement that means development and progress.

S. José d'El-Rey is now in a phase of economical and commercial growth. The city is divided into two by means of a very small stream of water which empties itself in the Rio das Mortes (deaths river).



Uberaba. - Catholic church

The two halves, have the names of S. Francisco and Matriz district, connected by three bridges, one provided with railway material and two old ones built with stone and lime. The latter have a respectable appearance, three enormous arches resting on the clear waters.

On both sides of this stream the city has a solid quay, recently built with paved sidewalks, beginning in the Oest of Minas railway station and ending near the City Hall some 350 metres away from one another.

The City Hall like nearly all the others in Minas State is stylish,



PANORAMIC VIEW OF THE CITY S. JOÃO DEL REY

wide and square and has two floors. It is an inheritance received from the colonial architecture. It has, however, a finer appearance than the majority of them, on account of the ornamentation of its front, windows and iron verandahs.

As a custom the jail occupies the ground floor humiliating the City Hall. Dreadful tradition roots! But there is a mitigating contrast: they installed above a public library with 16.000 volumes.

The market, near by, is a large building with plain front, unex-



S. João del Rey. - S. Francisco church

pressive, and it was inaugurated in 1893. A little further ahead of the railway station is the public theatre a good new and solid building with 500 seats.

S. Francisco church is the most noted building there and one of the most admired in Minas State. It is of stone, a kind of blue stone, abundant around the city. It is 24 metres wide, 53 metres long, and from its basis to the cornice has 33 metres height. Two cylindric towers, one on each side, end the front which has some noted high relief work in stone. It has six alters nicely worked in carved wood. It was Aleijadinho a celebrated Brazilian artist of the XVIII century whose fame will last long who built this church.

The Hospital is a two floor building; a threading mill and other buildings give a noble appearance to the city strikingly contrasting with the work of colonial times.

Besides this, S. João d'El-Rey has three newspapers, telegraph, post office, several factories, hotels, railway. It is surrounded by hills and at the end by a bright valley, the vegetation of which frames the houses.

The population of S. João d'El-Rey by the census of 1892 was 15.820 inhahitants, to-day must have over 25.000, as it has much progressed the last few years.

MARIANNA. — It is one of the oldest cities in Minas, founded one year after Villa Riea, and the first in that diocese.

The creation of a new bishop diocese was motive for a great festival on the 8th of December 1748 of which memory was kept in one of the pamphlets published at the time, one of the oldest of Brazilian press. It was called: « Academic prayer of congratulations and thanksgiving for the most happy entrance of his Excellency D. Frei Manoel da Cruz, first bishop of Marianna diocese, made solemnly public in its Capital on the 28th of November 1748, » But that has no great material interest. What we want to know is what is the city to day. It is situated in the centre of the State, on the east-side of Ouro Preto and near Carmo river. While the whirlwind movement of mining was around Mirianna, it got rich and was notable. The beatic king D. João V, used to call it my most beloved city. But it went backwards, the noise of the axe and shovel ceased, the gold disappeared and the beloved city began to ruin itself. Now is reduced to 7.000 inhabitants, 4.329 males and 2.422 females according to the last census.

In the suburbs they started the wine industry, cultivating vines with success.

Curvello. — In its direction runs the Central of Brazil railway now well advanced in its construction until the S. Francisco river.

This city will be one of the most important commercial emporiums of the centre of Minas, because of its privileged location in the crossing of the carriages roads, roads that on the East lead to Diamantina, on the North lead to Montes Claros and Januaria, on the West to the cities built by the affuents of the S. Francisco river. Everything contributes to make of it a centre of commercial exchan-

ge which operate repercussion till the extremes North and Northeast of the State.

Besides being commercial Curvello is also an industrial centre of considerable activity, the threading mills of the suburbs, the hat factories, leather tanning works, and pasture of cattle ranches are so many other elements of life and a foundation for prosperity on which it can base its bright future.

BARBACENA. — It is placed in the Mantiqueira mountains, just as if it were from a high window contemplating the other cities of that



City of Barbacena

region. There from comes the reputation of its fresh air, being considered a natural Sanatorium. It became a city in 1840. Situated at kilometre 379 of the Central of Brazil railway and 1.150 metres above the sea-level. It is the city with the mildest climate in all the State of Minas and remarkable because of its commerce. It has excellent milk, good pastures grounds, newspapers, telegraph, electric illumination, nice hotels, an insane asylum, schools, factories and some buildings of good appearance as that of Dr. Rodolpho Abren in the centre of an enormous garden. The population of the city is 27.409 inhabitants.

Sete Lagôas. — A city with 12.000 inhabitants, received this name after the neighboring lakes, it is located in the low part of a

valley of the *Velhas* river (old women river) which ought to be called Gold river because of the quantity of this metal which this river contains. Sete Lagôas is near the Central of Brazil railway.

Sahará. — It was one of those ruins of city which did not resign itself to live its past. Sabará is located on the Central Railway road, it is the tired type of the cities of olden Minas: churches, low houses and houses with upper stories, up and down hill. It was once important, « the most important centre of exploitation of the inte-



Barbacena. — Pomologic garden and House of Dr. Rodolpho Abreu

rior of Brazil, with regard to the physical, geological, meteoroligic and prehistoric geography. »

On the other side of the mountain ealled Piedade, is the new Capital of Minas. Sabará is as old as Ouro Preto and Marianna and as nostalgic as any of them. But now it is renewing with vigor.

Cataguazes. — Its name comes from the Indian language (Caá-atá-guá, which means a valley of thick woods). It is one of the most prosperous of the cities in the Matta region. It has a good commerce and is very progressive. We must note that some fifty years ago, it was but a stopping place for the passers-by, a hamlet without impor-

tance. All the municipium is full of nice green plantations, coffee and grain. There from the impulse that pretty Cataguazes received in the way of progress. To-day has 1.681 houses and over 2.000 with those of the suburbs. It has some pretty public buildings as the Forum, the two banks, two coffee farms, a large theatre, one of the best in that region, a church, several hotels, schools, newspapers, telegraphs, etc. They are installing electric light system of Cataguazes, as well as a construction of a branch railway line, connecting it with S. João Nepomuceno, a pretty neighboring city. Cataguazes had some [8.000 inhabitants according to the census of 1890, but to-day



Panoramie view of the City of Sabará

must have the double, and it is the one in the State of Minas with greatest future possibilities.

Passos. — This city about which we spoke above, had nothing to do with the transitory greatness of mining. Its importance is quite recent and came from the dairy industry.

Passos is the seat-of a good region. It had to progress, as its branch of industry has been in full bloom.

Are worthy of note: the eattle fairs held in this eity every year.

DIAMANTINA. — It is named after the rich layers that were discovered there and produced as much as three and four millions a year and are not as yet exhausted. It became a village, in October

1821 and city by provincial law n° 93 of 6th May 1838. Has regular commercial relations directly with Sete Lagoas by the Central Railway of Brazil. It is the seat of a diocese with a bishop. Has a seminary and some public and private instruction establishments. Its population is 12.414 inhabitants. It is an active city with a hard working population. It has great future possibilities and seems to be about lifting itself rapidly from its modest situation. It has several threading mills, three newspapers, clubs, hotels etc.



Cataguazes. - Credito Real of Minas-Geraes Bank's Agency

ITAJUBA. — Picturesque city of 8000 inhabitants, gay, lively on the right bank of the Sapneahy river. It is low, prolonging itself over the hill-side among the Mantigueira mountains one of which S. Joãs is 865 metres above the sea-level.

Its buildings are of no great importance. It has a City Hall, old and heavy style; the market 46 metres long; Santa Cecilia Theatre; the Matriz church, not pretty in its exterior and without towers. Itajnbá is formed by five large squares, four smaller ones, 20 streets and 700 buildings. It has water supply, several factories, one library with 8,000 volumes and a pretty public garden.

EXTRE RIOS. — Small picturesque city. Its population by the census of 1892 was 3.787 males and 3.894 females. To-day it has probably some 10.000 inhabitants and rapidly develops its agricultural production.

But we must be excused the list with the names of the cities is rather long and would bore the reader. There are one hundred and seventeen of them!



Cataguazes. — Forum building



PANORAMIG VIEW OF THE CITY OF PASSOS

THE STATES OF MATTO GROSSO AND GOYAZ

The two largest States of Brazil are those that constitute their boundary lines with the other republies of this continent. Those States are so large that two, only two, form the whole of the frontier line, that is not on the ocean side and neither one of these two States has the density of population of over 0,1 per square kilometre.

These two States are: The Amazon at the North and Matto Grosso at the South. About the former we have already written in the beginning of this section of the book, devoted to the 20 States that together with the Federal District form the Federative Republie of the United States of Brazil, and about the latter we will now speak to close the last chapter of the book. One as the other also form the two largest territorial blocks of the Brazilian political division, the former being the largest and the latter the next one in size, of all the other States. From the whole American continent only four nations exceed them in surface: - the United States. Argentine, Mexico and Peru, and from Europe only Russia. France and England together could be placed within this one Brazilian State and there would be room left to place any of the largest capitals of the world or the whole of some small nations, as Switzerland. Holland, Portugal or Belgium. That colossal tract of land reaching 1.379.651 square kilometres, constitute, notwithstanding, a small world most of it hardly discovered and never tread upon, as we see that only the lands alongside the large rivers where eities have been installed here and there are known. The interior bulk covered with forests and affluents of other rivers is, together with its northern neighbor, reserved for the migrations of future Brazilian population, when the density of the region working the eivilisation alongshore shall have reached its phase of expansion searching the interior. Until then, Matto Grosso, will be for the Brazilians of the States on the Atlantic, a very remote, far distant province, though identified with the common fatherland by its history and destinies of its race, by the language, by the enstoms, by the ideas, which are the flesh and the blood of a nation. Until then will reign over those extensive unknown places the mystery of their stones, of their rolling waters, the murmuring rumour of the intact woods, and in their peace the covered up gold and diamonds, which

some day will play its role in the universal storm of envy, the damp silence of the old grottoes and the long and even noise of the waterfalls lamentations, that to-morrow have to be subjugated, transfigured and distributed in light through the cities and in intelligent power to the industries.

When will that be? Twenty years from now, 50 years, a century? Who knows it?

The railways will be the instrument of the ruin of that peace, immense and dumb made by the mixing of all the voices in the liberty of space. It will destroy the homogeneity of that peace and incorporating to the hurricane of the worldly life these tranquil remnants of



Cataguazes. — Forum building

the planet entrusted to the aptitude of the race. To be sure that such a conquest will not be the work of a man, nor of a life, but from the height of our advanced age, however we can see the initiation of the march in that direction. The railway systems of S. Paulo and Minas are insensibly turning in the direction of those frontiers.

As yet communications are only possible by water. No Brazilian can normally penetrate in that part of Brazil without crossing some foreign country, Uruguay, Argentine and Paraguay waters. The trip from Rio de Janeiro to Cuyabá is more delayed and more uncomfortable than a trip to any European country.

Half a century ago attempts were made to build railways between this State and the sea-coast. After the Paraguayan war when the lack of good roads was felt by tremendous adversities, the idea of the establishment of those inter-communications stimulated the thoughts of the governments and several attempts were made.

The railway is not impossible but the size of the work was not in relation with the resources of the country and has been always postponed until lately when the present Public Works minister, Dr. Lauro Müller arranged for the initiation of that line.

Matto Grosso is the State that possesses less population in all Brazil not having over 150,000 inhabitants, — the total of any second



Cuyabá. - S. Gonçalo church

elass city in other continents. We can say: it remains to be proved, and if in the political form it is a State, it can't be helped but to be judged a true desert with all kinds of mysterious suggestions of the other deserts of the planet. With this marked difference, however, — that it is a pleasant desert to the traveller, a rich desert only awaiting for the pioneers to invest it and populate it.

Enjoying a good climate, though somewhat hot, it would have three times as many cities as it has, and would largely contribute to the exports of the country, probably as much as Amazon and Para, if the roads projected 30 years ago had been built between its Capital and Paraná, or from the Madeira river to the Amazonic basin overcoming the falls that obstruct it.

The Capital and other cities. — In the peculiar situation in which it is to-day almost separated from the national sociability by the difficulty and imperfection of its communications, Matto Grosso elaborates out of its own vitality a progress, altogether a relative one, slow but constant, which can be translated by the growth of its modest Capital and other cities in plain quiet phase.

Cuyabá is the name of its Capital in a concentric point almost at the same distance from three points of the State, as Matto Grosso



Cuyabá. - Harbour and Landingstage

has more or less the figure of a curvilinear triangle, embroidered by the strong relief of the Pareeis, North, Amambahy, Maracaju and other mountains.

Cuyabá has about 30.000 inhabitants, lining two kilometres of the Cuyabá river on the left bank, and built we might say, in the centre of the State, and a little also in the centre of South America. It is not so hot as we might suppose, thanks to the circumstance of being on a hill which gives it an altitude of nearly 230m. above the sea-level.

It is known that it was founded by a group of S. Paulo people from Sorocabana and some Portuguese who settled there in 1719.

One of the Portuguese Cabral Leme said that he was a descendant of the great navigator Pedro Alvares Cabral. About its climate as about that of all the State says Dr. João Severiano who knew a large part of Matto Grosso, as he went there on a boundary line commission: «composed of two wide regions the top and the lower part—its climate conditions are quite different by its hypsometrism, nature and influence of the soil.

The dry air, the atmosphere relatively lower than that of low regions, is consequently more agreeable, and the waters the most pure and sound, not only constitute a healthy and most healthy climate of the upper part where endemic sickness is almost unknown and plagues hardly ever go there. And, then, if that region embraces about two parts of the Matto Grosso territory it is not by the balance that we must judge the climate and health conditions. »

Cuyaba city has an area of about four square kilometres, the largest width about two kilometres, and the length three thousand and odd metres.

A large part of the streets is paved, with irregular stones, generally this pavement is not good. Among the best streets is Treze de Junho. As a rule those streets are narrow and not lively, as the city has that physiognomy so common in the interior cities, customs very timid and good but antiquated habits. It has several squares, among which the one where the Public Garden is, which is pretty, filled with high palm-trees and decorated in the centre by a monumental fountain. The heart of the city is the Largo do Palacio (Palace Square) where is the garden we have just mentioned and where people meet on Thursdays and Sundays to listen to the concert given by one of the military bands. The sociability is not so backwards that they should not have their clubs and these open their doors for nice and lively parties. There are hotels, tramways, telegraph, newspapers, business houses, some factories, banking agencies, everything a modern city should have.

The buildings are yet old style, lately however, some new buildings of better appearance are going up.

Among the public buildings we mention, the Government palace of simple but heavy architecture, the War arsenal, the Pyrotechnic laboratory, the Charity Hospital, the Treasury Department, Salezian school, Lazaros Hospital, Diocese Seminary, City Hall, the State treasury, the State Congress, the Jail, the Official Gazette, the S. Gonçalo church etc.

Several churches embellish the city: the Cathedral, the Rosario, the Bom Despacho, the Boa Morte and the Passos churches.

Public Instruction, Police, Production, Commerce. — The State has 91 grammar schools spread through the principal localities. In the Capital is the Sailors Apprentice School, maintained by the Federal Governments, the Lyceum, several schools, one library maintained by a private association.

The police is made by an infantry battalion with 300 men, commanded by a major. The present production of the State is miserable, compared with the enormous riches it has in the greatest variety and abundance. At present the bulk of its exports is the matte (Brazilian tea), mostly all sent to the River Plate. Large tracts of land are cuttivated with plantations of ilenparaguayensis, the largest part of which belongs to a celebrated export enterprize, with factories in Buenos Ayres, though it is Brazilian and has its main office in Rio.

It exports also meat, cattle, rubber and other products of the forest. In the municipiums, Paconé, Rosario, Caceres and others the cattle industry has considerably grown during the last few years. In a place called Descalvado is a large xarqueada (factory to prepare dry salted beef) and a packing house, canning meats, with the name Productos Cibits exporting large quantities of powdered meat to London and other markets, wherefrom they are re-exported after being properly put up and labelled so as to be placed on the shelves of Brazilian pharmacies. This enterprize kills 60.000 oxen every six months, or we might say yearly, as the factory only works six months in the year. Besides this, Matto Grosso has a variety of mines.

Among the industrial establishments of Matto Grosso we must mention the important sugar, alcohol and brandy factory, known as *Usina Itaicy* on the banks of the Cuyabá river, not very far from the Capital.

The building of the sugar factory is a large two story building with 21 front windows, of good architecture, It measures 64 metres length by 44 width and 14 height. The factory chimney measures 31 metre height. This factory grinds 150,000 kilos of cane in 24 hours, its machinery being the most improved one and there being an installation of electric lights.

A Decauville line with 10 kilometres extension runs through the cane plantations. This establishment cost 2.300:000\$000 and employs 500 hands. Besides this, Matto Grosso has 80 other sugar factories but smaller ones.

The city of Cuyabá is progressing. There are 30 dry goods and fancy goods houses, 85 smaller stores, 81 bar-rooms, several good

groceries, 4 book stores, 5 pharmacies, 3 billiard rooms, 8 bakers, breweries, soap factories and other stores and factories. It has a small theatre « Minerva », 3 cemeteries, slaughter house, newspapers, telegraph, post office, tramways by animal traction belonging to the Companhia Progresso Cuyabano, a War Arsenal of the Federal government and a banking agency.

CORUMBA. — In the opinion of many people the first city of Matto Grosso is not its Capital but Corumbá. At least this latter is more modernised, has more movement and more commerce. Those who go to Corumbá just like those who go to Manãos are most agreeably surprised when they get there. Nobody imagines after such a long and tiresome trip like that through exotic landscapes to find that document of European civilisation, isolated in that hidden corner of the continent. Corumbá is much smaller, and far less important than Manãos but in many things they look alike.

Like Manáos, Cornmbá is a resting place for the civilisation and commerce that marches to the interior of the continent. As Manáos it has only access after a long sea and fluvial trip, which does not lack original scenery. At the North orographic system of the Amazon, the liquid world, the impenetrable flora, at the South the lake system, the woods, the swampy grounds. There the sea-river, here the lake-ocean. The mosquitoes, in endless clouds complete the seemliness of the two cities. But it doesn't stop there. Corumbá reproduces the other even in the details of the constitution of the city. It is a city with wide streets, straight ones and with arborisation. It is a cosmopolitan city where we see different races and hear every language.

It is built on high ground at the West of the Paraguay river, which there has a tranquil bosom, almost immovable. On the other side of the city vast green fields are spread out, and afterwards far away swamps. In front of Corumbá on the bank of the lake is a white building. It is a Bolivian Custom House station called Aduana de Porto Suarez.

Part of Corumbá is on that hillylike prominence, the other part is lower and in it are the buildings of the Federal Custom House. Storage houses, stores and residences.

The city has more than 30 dry goods, fashion, and fancy goods stores, some of them import houses, 60 stores, over 100 bar-rooms and small stores, grocers, etc, 4 billiard-rooms, 4 hotels, 1 brewery, 1 bakeries, 8 butchers, 2 photographing establishments, 1 iee, 2 powder and fire works, 1 soap factories, 3 watch makers, 1 jewelry establishments, 1 bank, branch of the « Rio And Matto

Grosso » bank with main office in Rio, 3 pharmacies, 3 newspapers, 1 public library and other establishments.

Among the best streets are Delamare which is equivalent to Ouvidor street in Rio de Janeiro, but much wider and gayer than the latter. There are dry goods stores, dressmakers, groceries, nice houses. It is paved and is quite a lively street. Among the public buildings there are the City Hall, the Barracks, the Arsenal, all of these stone buildings with terraces on top after the fashion of the old Spanish constructions.

A good portion of its population are foreigners and there are also Indians, as *Guarany* (one of the Indian dialects) is once in a while heard. This dialect is sometimes also spoken not only by Brazilians but also by natives of Paragnay who reside there. This city is growing. Its port is visited by the Lloyd *Brazileiro* steamers and some Argentine and Uruguayan ones and is to-day superior to some of the capitals of the other States.

Corumbà has three large squares: Santa Thereza, Nossa Senhora do Carmo and S. Pedro. It has public and private schools. It is, as we said, a cosmopolitan city and because of that its progress is real and rapid. Its main source of prosperity has not as yet been explored and that is the iron layers that surround it, with enormous quantities of this mineral. They will be the nerve of the commerce of this city as it did for the manganese in Minas Geraes, when capital and explorers full of initiative will turn up.

LADARIO. — Some six kilometres away from Corumbà, also on the banks of the Paraguay river is the village of Ladario, where the Federal government maintains a large establishment for naval constructions and which is the second in the country. It was built in 1872 and there are large ship-yards and a lot of repairing material. There are five fortresses: S. Francisco, Junqueira, Conde d'Eu, Duque de Caxias, and Major Gama.

In front of the Ladario arsenal, is the naval station of the Matto Grosso fleet composed of small war ships. The gunboats: Carioca, Guarany, Cananéa and the dispatch boat Fernandes Vieira.

S. Luiz de Caceres. — About 48 leagues from Cuyabá towards the South-east is S. Luiz de Caceres, the seat of a municipium devoted to cattle raising. The city is on the left bank of the Paragnay river and near the seven lakes of the mouth of the Jaurn river. Its former name was Villa Maria. Its present name is in homage to the Captain General Luiz de Albuquerque e Mello Pereira e Caceres, who founded it in 1778. It was raised to the rank of city in 1876. Two leagues away from the city is the national farm of Caissára. Its population

was 8.000 by the census of 1900, to-day it must have 12.000 inhabitants. There are in the city two public schools one for males and the other for females. Two public squares: Jacobina and Quartel square. It has the following buildings: the Matriz church under construction, the jail, the 19th infantry regiment barracks. It is one of the best commercial markets of the State. The cattle industry as well as the one of rubber extraction make this municipium a rich one with a bright future being all the present difficulty limited to the dearness of transportation.

Nioac. — It is a small village without much importance, it has seven streets, four lanes, a public square with the Matriz Church, as in every village of the interior. There the 7th cavalry regiment drills. This municipium is vast and devotes itself to cattle raising, the matte industry, exploited by the Companhia Matte Larangeira. These are the principal sources of wealth of this place. Of this as of all the other villages of this State we can say they are asphyxiated by the distances in the vastness of the territory of the State.

MIRANDA. — Is another small village, obscure and forgotten with 400 houses and a little over 3.000 inhabitants. It is situated at about 1 kilometre from the Miranda river banks. It became village in 1857. Its main industy is the Brazilian tea — matte — exploited by the same « Matte Larangeira » Company.

Matto Grosso. — Historical far away city. Its population in 1890 was 971 males, 1.078 females. To-day must have 3.000 inhabitants. Formerly was called Villa Bella. It is located on the eastern bank of the Guaporé river at the North-west of Cuyabá eity being 115 leagues away from it. It was founded in a place called Pouso Alegre in 1751 by the 1st Governor and Captain General Antonio Rolim de Monra Tavares, Senhor de Azambuja.

In 1818 it became a city and till 1820 it was the Capital and residence of the Governors. Seven leagues South on the banks of the Barbadas river is the old national farm Casalvasco, to-day abandoned as it also seems to be the city itself.

There is not much to be said about the State of Goyaz. It is one of the few that have no railways, and the only one that has no steam navigation. It has already enjoyed that advantage from 1867 to 95, when, the subvention granted by the government having ceased stopped their line of the three steamers that were running in this State, one of which is still there getting rotten — the « Araguaya ».

Closed in the interior of the country without any sea-shore frontier to put it in contact with the other more advanced States, — Goyaz, enjoys the happiness of the forgotten ones.

Outside, by the sea-shore, where are in line the prosperous States, those who get rich with the utilisation of the efforts and the progresses of every one multiplied by exchange and reciprocity, those who profit by the direct relations with Europe and the balance of the world, outside, we say, is where life goes on with its pleasant or disagreeable subjects, and of it only lightly and very late there reach Goyaz some slight vibrations.



Goyaz. - Suburbs of the City and Market

The noise of a political storm, of a commercial catastrophe or a large and collective jubilation, only sound their echo in Goyaz after a long interval, sufficiently long not to alter the calmness of the Goyaz quietude.

The new life, the «carnest life», which, in exchange of a slight opening to enter civilisation will leave before us wide open a whole horizon, that painful life of the large cities, has not carried to Goyaz its disturbing elements.

There are several railway concessions, and some under study are inclining themselves threateningly upon the frontiers of the State. The objective point is Catalão, a very small city, where only now civilisation begins to arrive. This will be the breach. To reach there, will be the thing, once Goyaz is invaded by the railway it will lose all its first charm — the distance. To be far away, is a begin

ning of poetry and no tract of territory is so far from us, at present as Goyaz, as it is without transportation facilities to shorten its distance. It is in Brazil, yet it is just as if it were in another continent. But this situation will not last long. The railway tracks have already reached Araguary, six leagues away from its frontier and 13 from Catalão. The steamer, however, has not been able to reach there, though the State of Goyaz possesses 763 navigable rivers, according to Castelnau who explored a good number of them.

Yet, while the railway does not cross the Minas frontier in the direction of Catalão, the inhabitants of Goyaz are doing on their part everything possible to raise the material conditions of that portion of the country in their charge to be looked after, and it is not without pleasure that we receive their newspapers, the bearers of news information and statistics data:

GOYAZ EXPORTS IN 1902

Cattle oxen and cows	 60.216	Sugar, kilos			21.816
Horses	 592	Coffee, »			5.556
Pigs	 1.805	Marmelade, kilos			8.526
Sheep	 125	Rubber »			14.407
Tobacco, kilos	156.567	Crystal »			25.084
Bacon » . : .	 107.385	Hides »			19.850
Rice »	 60.600	Other products .			2.208
Grain, litres	 10.090				

In spite of the difficulties of communications and enormous distances, that its products have to overcome to reach the consuming markets, Goyaz succeeds in increasing each year the volume of its exports. We can then foresee the development it will reach on the day that the railway will do away with those drawbacks.

THE STATE REVENUE WAS:

Years			Value
1900.			720:829\$298
1901.			1.065:611\$000
1902.			1.002:100\$660
1903.			1.106:640\$080

As it can be seen in the table we gave above, the eattle raising industry is its main source of revenue and the government tries to encourage it because of the easy disposition of the products.

The crossing of races in the cattle increases in a considerable way the selling price, and that is an element of prosperity in many municipiums.

As to its finances, never mind how modest they are and probably,

because of it, Goyaz belongs to the number of those few States who close their accounts with balance in favor at the end of the year.

The present governor declared in his reports that the balance in 1901 was 160:000\$000. In that year the State revenue was of 1.065:611\$000 which was the highest till then.

The report states that the State of Goyaz has no debts caused by the issues of policies or loans excepting the one it made from the orphans fund.

Goyaz is an exemplary State in every branch of its administration.



Goyaz. - Abbadin Street

Its police is made by a small infantry company commanded by a major and with 210 men.

Its public instruction is furnished by 100 schools maintained in its majority by the municipalities, but they do not seem to be in sufficient number for a population of 244,506 inhabitants.

GOYAZ. — The Capital is built on the two banks of the Rio Vermelho, (Red river), an affluent of the Araguaya.

It had 13,000 inhabitants in 1900. It seems, at first sight, to be a low town, though 550 metres above the sea-level. This optical illusion comes from the circumstance that Goyas is among hills, quite near and that don't allow it to develop. This circumstance too takes away a little of its beauty.

For this reason the learned Conto de Magalhães was of opinion

that the Capital of the State ought to be transferred to Leopoldina, on the banks of the Araguaya, a place destined to great future.

Lately Goyaz has progressed a good deal — in relation to what it was ten or twelve years ago, having 2.000 houses, one floor ones, in the majority. The public buildings are quite modest. The Governors Palace is a square building only with a ground floor. The Congress building has an upper story.

It is illuminated with kerosene oil and the lamp posts are wooden ones. There is no statue or monument in the city.

Catalão. — It is a small city of great future because of its splendid position, being the key to the South of Goyaz commerce. This circumstance will be far more advantageous when the Mogyana railway will reach there. Its rails are already in Araguary 13 leagues from Catalão.

Pyrenopolis. — Formerly was called Meia Ponte and is built on an eminence near the Almas river. Some 10 streets and 3 squares, which are not paved neither have they any garden, two other smaller squares, some lanes and cross-streets and there we have the city, which is the most important of the State after the Capital. The square that offers prettier view is the one called Matriz square, which is the heart of the little town. Into that place run the Bomfim, Deodoro and another street called Rosario, somewhat inclined. They are generally paved with large stones. The houses are simple, of a primitive architecture, pure colonial times. Most of them have only one floor, except one or other with upper floors. One of the best belonged to a rich merchant Mr. Joaquim Alves Oliveira, and which they say is the biggest and nicest private house in the State.

The Matriz church is an old one, built some 80 or 90 years ago, of no architectonic merit. It is large, however, and is well preserved. In the front has two towers at the sides and in one of them a large clock. Besides this one there are the Nossa Senhora do Rosario, Nossa Senhora do Carmo and Senhor do Bomfim churches.

There are also the ruins of another church half drowned in the vegetation on a hill in front of the city.

Pyrenopolis is not a lively city. Its population was 5.046 and today must have some 10.000 inhabitants.

It has but little commerce. Business houses only open during four or five hours during the day. In 1892 when the general eensus of the country was taken, there were 12 dry goods stores, 16 barrooms, 3 jewelers, 1 ironsmith, 2 earpenter shops, 1 tailor, etc.

The window-panes of some houses are of mica. During the month of August, Pyrenopolis has a little movement, there is general exit of its population, it is a festival for the devotion of Nossa Senhora de Moquem a little way from the city. To that place go during that month the largest part of the inhabitants.

Paracanjuba. — It was formerly called Pouso Alto. It is a small city with 5.000 inhabitants with 800 houses, built on a picturesque hill, so that the central point of the city, the Matriz Square, is in the highest plan of the hill, surrounded by the best houses of that locality and in the rear is the church, of a singular architecture, the



Goyaz. - Bridge over the Rio Vermelho

front ending in a low form, not elegant and two kinds of small towers covered with tiles.

From this square starts the main street, crossed by another, narrow and inclined, ending in another square, covered with grass where is the old building of the City Hall and Jail. There are two other streets and some lanes of no importance, with eight stores, two pharmacies, six bar-rooms and that is all.

Morrings. — Formerly called Villa Bella, population 11.000 inhabitants (including Santa Rita, Desterro, and Caldas Novas) and some 700 houses. A traveller in 1892 wrote thus about it: « Morrinhos, to-day, is no more the old Villa Bella, is simply the Morrinhos city, probably raised to that rank on account of its future progress, because in the last five years, the only difference I noticed there

was the increase of one more business house, some new houses substituting other old ones. It is the same pleasant and hospitable people. "The city has somewhat improved after that and is becoming an export centre of cattle and hides, which is the principal industry of the Municipium.

It is surrounded by beautiful fields and fine woods with palmtrees and other fine specimens. The climate is excellent.

We must not mix it with the city of the same name in Matto Grosso. This is a small city with 5.000 inhabitants, seat of one of the richest municipiums of Goyaz. It is built by the river Corumbá a river of beautiful aspect, which crosses further ahead with a little river called Bagagem. The panorama is picturesque.

It has as to its location the fault of the greatest part of the cities of that State. It is built among hills that prevent its development and hide the horizon.

There from the melancholic aspect of the city, aggravated by the merchants who close their houses in the city many hours in the day, while they work in the fields and farms.

Some 4 streets and 6 or 7 eross-streets, narrow and inclined form the city. They are paved with irregular stones. It has 8 dry goods houses and 10 bar-rooms. The people as happens in all the States are hospitable and good natured, most of them farmers, eattle raisers, others planters of tabacco and coffee.

Luziania. — Or Santa Luzia is another city of Goyana. It is 50 leagues away from the Capital. It was founded by Bueno de Azevedo in 1746.

It has the aspect and topographic disposition common to the majority of the interior cities. The Matriz square is the *forum* of those interior villages. That of Luziania is an ample one and inclined. The Matriz church, all whitewashed, with square towers ending by pyramids occupies the rear side of the square. The houses are very modest, spread without order a little everywhere, going up the hill. The Rosario, Cadeia, Jambeiro, and Cotta streets are the principal ones. In those we see 15 houses with upper stories. There are also 11 streets and some lanes without any alignment or regularity. In 1892 it had 3.000 inhabitants, to-day has about 5000, 3 churches, 16 stores, 8 bar-rooms, two pharmacies, 4 schools.

The principal industry is the extraction of crystal and rubber (mangabeira trees) of which a good deal is exported. The commercial life of the city is insignificant. It happens there what happens in most cities of the interior, the merchant only opens his store

during certain hours of the day, and many days doesn't open unless some one knocks at the door.

Luziania manufactures excellent marmelade. Its fame reaches S. Paulo and Minas markets. A curiosity of that municipium is the enormous vestige of the old mining, in the deeply excavated caves. Between this small city and the Minas frontier are the Crystals, ridge of mountains thus called because of the many cristal layers found there.

Santa cruz. — This is the seat of the tobacco producing municipium filled with gold layers, unfortunately unexplored.

There are the following buildings: the Matriz church and the Rosario church, the former built by the provincial government, the latter by the people. The City Hall, Court House and Jail in a fine building. It is of modern style, the best in Santa Cruz.

It has 6.000 inhabitants. As Luziania, its soil shows it was mined. It is situated 180 kilometres away from Araguary.

* *

Having in view the marvellous progress of other federative entities of Brazil there is no contradiction that Matto Grosso and Goyaz need to develop great efforts to succeed accompanying them. Unfortunately they struggle with two dreadful enemies: the density of population and the enormity of their territory. Matto Grosso in itself is a nation and a great nation. Its 1.376.65 1 square kilometres would furnish territory for three or four States. And the same can be said of many of the ex-provinces.

What we have said of Goyaz shows that it has not accompanied the general development of the country. In fact that State and Matto Grosso, Piauhy, Santa Catharina and Rio Grande in smaller proportions, constitute the group of provinces, which were not, and are not in the ease of assuming at least in the same latitude as S. Paulo, Minas, Bahia, Rio Grande do Sul, Pará, etc., the responsibilities that the constitution of 1890 bears upon them with the title of State.

But, if in that group the progress of Brazil, could be called moderate and slow, in the latter ones, principally in S. Paulo, Federal Capital, Amazonas, Pará, Minas, Bahia, Rio Grande do Sul and Paraná, etc, the last 15 years has seen an evolution in agriculture, commerce, general industry, transportation, arts, manufactures, development of public wealth, eity improvements, and all the expressions of culture, strength, power, and civilisation of the

country that, really Brazilians, can without ridicule or optimism feel proud of the present situation of Brazil, and feel glad for the anticipation of the future victories already sketched.



TABLE OF CONTENTS

The	Brazil of To-day .						 •	7
Teleg	graph and railroads.							14
Arm	y-Navy-Merchant Mar	ine.						21
Inve	ntors and Men of Sci	ence						35
Thin	kers and writers .		•					71
Musi	eians, Painters and S	Sculptor	S					113
The	State of the Amazon		:					135
The	State of Pará		•	,				175
The	State of Maranhão .							214
The	States of Piauhy and	Ceará						229
The	State of Ceará							238
The	States of Rio Grande	do No	rte a	nd P	arah	yba		251
The	State of Parahyba .							260
The	State of Pernambuco		,					267
The	States of Alagôas and	d Sergi	ре					287
The	State of Sergipe .							301
The	State of Bahia							311
The	States of Espirito Sa	nto and	Rio	de J	Janei	ro		345
	State of Rio de Jane							354
The	Federal Capital .							369
The	State of S. Paulo .	٠.						480
The	State of Paraná .							494
The	State of Santa Catha	rina						528
The	State of Rio Grande	do sul						546
	State of Minas Gerae							570
The	States of Matto Gros	so and	Goya	Z				612



TABLE OF ENGRAVINGS

Comparison of the area of the five lar-	1	Torquato Lamarão	48
gest countries in the world	15	Pereira de Lyra	49
Rio de Janeiro. — Praça « Quinze No-		Oswaldo Faria	50
vembro»	45	Vidal Brazil	52
Bailways in Brazil. — The Grota Funda)	Barbosa Rodrigues	56
Viaduet S. Paulo	17	Barão de Capanema	59
Engineering Works in Brazil; Bridge		Baptista Lacerda	61
over the rio Ypiranga in Parana	18	Pereira Barretto	62
Engineering Works in Brazil: The		Lauro Séveriano Mülter,	64
celebrated Carvalho viaduct on the		Paulo de Frontin	67
Parana raifway	20	Francisco Bicalho	68
Rio de Janeiro. — Imbahy fort	21	J. Martinho	69
» Large Rialengo cartridge fac-		Carlos Moreira	70
tory of the War Ministry	22	Ruy Barbosa	72
Infantry camp during manœuvres	24	Amaro Cavalcanti,	74
School-eruiser: Benjamin Constant	23	Barão de Rio Branco	73
Tamandaré (cruiser) 4000 T., built at		Arthur Orlando	76
the Rio de Janeiro arsenal	26	Sylvio Romero	77
Battle-ship Deodoro	27	Joaquim Nabuco	78
War transport Carlos Gomes	28	Mello Moraes	80
Battle-ship Riachoelo	28	Machado de Assis	81
Cruiser-torpedo Tymbira	29	Carlos de Laet	82
Cruiser Barrozo	50	Oliveira Lima	85
Marine practice, shooting at a target .	50	Assis Brazil	84
Rio de Janeiro One the pavilions of		Clovis Bevilaqua	86
the Marine infantry barracks	51	José Carlos Rodrignes	87
School ship Guararapes	52	João Ribeiro	88
Merchant Marine Model of river		Rocha Pombo	89
steamers of 500 tons of the « Com-		Virgilio Varzéa	90
panhia Maranhense »	55	Nestor Victor	91
Merchant Marine Model of steamers		Medeiros e Alruquerque	92
of 2000 tons of « Brazilian Lloyd » .	34	Affouso Gelso	93
Santos Domont	56	Pires de Almeida	94
Mello Marques	57	Goellio Netto	
The submarine boat Mello Marques	57	Aluizio Azevedo	98
Landell de Moura	38	Xavier Marques	99
Huet de Bacellar	59	Julia Lopes de Almeida	100
Lieutenant Radler de Aquino	41	Arthur Azevedo	102
Engineer Ribeiro da Costa	42	Olavo Bilae	105
Adel Pinto	44	Magalhães de Azeredo	104
Gomes Pereira	45	Augusto de Lima	
Oliveira de Menezes	46	Fontoura Xavier	
Eduardo Claudio	47	Mucio Teixeira	
The « Trochoide »	47	Lucio de Mendonça	

Luiz Guimarães (filho)	110	Bauk of Rio Pums-Landscape at the	
Luiz Edmundo	411	time of filoods	169
Raymundo Corrêa	id.	Manáos. — « Amazonense » gymnasium.	170
Alberto Nepomucéno	113	» Public-School	475
Henrique Oswaldo	114	» Public-School	174
Meneleu Campos	115	Belem Building of scholar's group	
Francisco Braga	116	on the Baptista Campos place	175
Abdon Milanez	117	Belein Modern Cuban Buildings	179
Carlos de Mesquita	119	» Statue of the bishop frei Caetano	
Rodolpho Bernardelli	id.	Brandão	18.
R. Bernardelli. — Christo e a adoltera.	120	Belem Frei Caetano Brandão's Square	189
Corrèa Lima	121	» Cathedral de Belem	18
Corrêa Lima. — Mater Dolorosa befon-		» Monument to General Gurjão, on	
ging to the Fine Arts Institute	id.	the Independencia place	18
Ludovic Berna	122	Belem Palace of the State's Governor	185
Souza Aguiar	125	» Building of the Paco Municipal .	188
Ramos de Azevedo	124	» A part of the Municipal Park .	189
Oliveira Passos	125	» Independencia Avenue	190
Heitor de Mello	126	» Republic Monument, on the Re-	
Rodelpho Amoedo	127	public Square	191
R. Amoedo. — A narração de Philetas;		Belem « Da Paz » Theatre (after its	
belonging to the Rio Museum	128	restoration)	193
Antonio l'arreiras	129	Belem. — The Cemetery	193
Rodolpho Chambelland	130	» The church of Our Lady of the	
Henrique Bernardelli	131	Carmo	196
Dr. Constantino Nery, governor of Ama-		Belem Front view of the Lauro	
zon State	155	Sodré institute	198
Dr. Silverio Nery, ex-governor of Ama-		Lycen Paraense	200
zon State	156	Belem School group Building of	
View of the town of Manáos	157	Nazareth	201
Manãos. — Eduardo Ribeiro's Avence .	138	Belem. — Asylum for the poor, Interior	
» State's Treasury and Recei-		Garden and Refectory; Men's Side .	203
ver's office	139	Senator A. Lemos. Intendant of the Be-	
Manáos. — A part of Ribeiro's Avenue.	141	lem Municipality,	20-
» Monument of opening of Ama-		Belem. — Mausoleum of General Gurjão	
zonas river to the international Trade.	142	in the solidade Cemetery	200
Manáos. — Public Market	145	Type of revolver guns as used by the	
» Eduardo Ribeiro's Avenue.		State Military Regiment at Pará	208
Commercial houses	145	Belem. — Building of Avenida Deodoro's	
Manáos. — Garden of the Governor's		scholar group	209
Palace. The west side	148	Dr. Augusto Montenegro. Governor of	
Manáos. — Cathedral Church and		the Pará State	211
Square	150	Senator Benedicto Leite	214
Manáos. — A part of Eduardo Ribeiro's		S. Luiz. — The Municipal Administra-	
Avenue	155	tion	212
Manáos. — Court of law Palace-Princi-		State of Maranhão. — Panoramic view	
pal front	159	of the city and harbor of S. Luiz	216
Manáos. — S. Sebastião's Square and		S. Luiz. — Benedicto Leite Square	218
the Amazonas Theatre	163	» Conçalves Dias Monument	219
Manáos. — The Saloon of Amazonas	10.	» Gomes de Castro Avenue	220
Theatre	164	» Reading-room of the Public Li-	034
danáos. — Benjamin Constant's Insti-	LON	brary	221
tule	165	S. Luiz. — St-Antoninos's church and	999
THE DIE DIE ACTE	1107	SOIGHTE	-

S. Luiz. — View of a Part of the « rua		Macció. — The Cathedral	290
do Sol »	225	» Do Commercio street	292
S. Luiz. — Part of the @rua dos Reme-		» Principal railway station	295
dios»	225	» The Martyrs Square	295
Large Manufactory of cotton tissues		Pilar View of one of the principal	
« Manufactora Caxiense »	226	streets	298
S. Luiz. — Da Misericordia Hospital .	227	Pilar. — Commercio street	299
Therezina Aquidaban Square and		Paulo-Affonso falls, view of the princi-	
Quatro de Setembro Theatre	250	cipal water-jump	300
Therezina. — S. Benedicto's church	251	Aracajú. — A part of the landing-place.	502
View of a part of the city of Parnahyba	252	» Aurora street	505
Piauhy City of Parnahyba, rua		» Matrix church	304
Grande	235	» Prison Place and Buildings	505
Piauhy Types. — A cow-keeper	257	Bahia. — Quays and Landing-Place	515
Fortaleza. — Public Market	239	» The Governor's Palace	514
» Boilding of the Municipal Admi-	,,,,,,,	Municipal Palace	316
pistration	241	» Palace in the Victoria street, Go-	010
Fortaleza. — Gymnastic-room of the	~	vernor's residence	517
Marine Apprentices School	242	Bahia. — Senate building	518
Fortaleza. — Statue of General Tiburcio	245	» Monument of the Riachuelo square	519
» Normal College	244	» The pyramid of the Passeio Publico	520
» Square and station of the Batu-	2.4.4	» National Independance Monument	020
rite Railway	247	Duke de Caxia Square	321
Fortaleza. — Caio Prado Avenue	218	Bahia. — S. Bento street and Convent.	522
» Formosa street	249	» The Catholic cathedral and Quinze	022
Natal. — Santos Reis Magos Fortress at	2.40	de Novembre Square	525
the entrance of the Nafal bar	252	Bahia. — Fine Arts College	324
Natal. — Harbor and city of Natal	255	» Electric tramway station	528
» Government Palace	255	» Large textile Manufactory da Boa	17=0
» Conceição Street	256	Viagem	531
Mossoró. — Seis de Janeiro Square.	257	General view of the «Pitanga» sugar	+3+31
» Flores Street	258	factory, in the Matta of S. João muni-	
» Da Matriz church and Square	259		554
Parabyba. — Das Mercés church and	209	cipinm	004
street	261		358
Parabyba. — Old convent of S. Francisco	262	ce. — Popular Holiday	359
» The Governor's Palace	265	Alagoinhos. — Paço Municipal (square) Joazeiro. — The railway station of the	13138
» Fiscal Delegation	264 264	line Bahia to S. Francisco	541
Recife. — Interior anchorage and the	204		941
naturai reel	268	Valença. — Large textile fabric : «Todos os Santos».	542
Recife. — View of Primeiro de Marco	200	Ilheos. — Panorama of a part of the city	344
street	270	Victoria. — The Moreno and the chapel	044
Recife. — Estação da E. P. de Carnaru	271	of Penha	346
» The market of Derby	275	Victoria. — A part of the city and ancho-	040
» Suburb of Recibe and Sete de	210	,	347
	071	rage	041
Setembro Bridge	274	Victoria. — Another part of the city	710
Recife. — Nossa Senhora da Penha	J349.55	and anchorage	348
Church	275	Cachoeira de Itapemerim. — Peak of	251
Recife. — Legislative Congress and Gymnasium huilding	077	Itabira	551
Recife. — Insane Asylum	277	Cachoeira de Itapemerim. — Southern	352
	278	part of the city	355 355
. 0	990		999
V. Neesen et Co	280	Nichteroy. — The celebrated rock of	387

Petropolis. — The Municipal Prefect's		Rio. — Fountain in the « Gloria » Gar-	
Palace	559	den'	598
Nova Frihurgo. — General view of the		Capital Federal. —Part of the acclama-	
Anchieta Collegio	560	çãu Park	399
Campos. — Quinze de Novembre street		Rio The Pão de assucar and the	
and Parahyba river	361	Morro da viuva	401
Campos. — S. Salvador Square	562	Rio The Military school	402
» Lyceum of Humanities and Nor-		» Gulf of Botalogo	405
mal schoul	363	» The Ancient Emperor's Resi-	
Campos. — Water reservoir	364	dence, at present National Museum .	404
Barra do Pirahy. — Great iron Bridge		Rio. — Monument of the discoverers of	
across the Parahyba river	565	Brazil	400
Vassouras View of a part of the city		Rio. — Statue of Buarque Macedo	407
and the Barão de Amparo park	368	Capital Federal. — The 1° de Março	20.
Rio. — Dos Mineiros and Alfandega	000	street	409
quays	570	Suburbs of Rio. — Tijuca Forest	410
Rio. — Anchorage and part of the city.	371	Capital Federal. — The Public park .	411
» Santa Luzia church and plain	372	Rio. — The Mint	412
» General Osorio's statue	373	Capital Federal. — Part of the Central	412
» The Cathedral and do Carmo church	374	Avenue	417
» S. Pedro de Alcantara Theatre	575	Dr. Gabriel Junqueira, one of the cons-	415
» Front of the Benjamin Constant ins-	010	tructors of the Central Avenue	414
titute	576		
Rio. — Terrace of Passeio Publico	376	The S. Francisco church	415
	370	Dr. Del-Velchio, engineer	416
» Initial station of the Central of Brazil	~==	Rio. — Part of the New Avenue	417
Railway	377	» New Buildings	418
Rio. — Sea-shore of Leme	378	Capital Federal. — Part of the Central	
» Statue of D. Pedro I	579	Avenue	419
» Quinze de Novembro square and		Rio. — New Buildings	420
Board of Trade building	380	» » »	421
Rio. — Senador Dantas street	381	Capital Federal. — Pavilion in the S.	
» Front of the Gonçalves de Araujo		Louis' Exhibition, erected un the	
Asylum, in campo de S. Christovão .	582	Central Avenue	422
Rio. — The Post office and Exchange		Rio. — New Buildings	424
Building	383))))))	425
Rio. — Town Hall	384		426
Ex-Président Rodrigues Alves (1902-		» »	427
1906) who-initiated the Riu de Janei-		» » — The palace of	
ro improvements	38 5	the daily paper: « O Jornal do Com-	
Dr. Pereira Passos, Prefect of Rio de		mercio»	428
Janeiro	386	Rio. — The New «treze de Março»	
Capital Federal. — Isle das cobras and		street	429
the Naval school	387	Rio. — New Buildings	450
The National Printing office	588	» Another view of Botalogo and Bei-	
The Polytechnical school	390	ra-Mar Avenue	431
Rio. — New Buildings: Court of Justice	392	Rio. — New Buildings	432
Capital Federal. — The Municipal Thea-		Capital Federal. — Botafogo Avenue .	455
tre	595	Rio New Buldings	454
Rio Glass windows of the Municipal		» New Buldings Offices of the	
Theatre	594	daily paper : « O Paiz »	455
Riv. — Glass windows of the Municipal		Riu New Buildings	456
Theatre	395	» Construction of the Canal do Man-	
Capital Federal. — Construction of the		gue	437
Passos street	397	Rio. — Statue of Viscount do Rio Branco	458

	Guarattugueta. — view of a part of the	
439	eity and port	484
440	S. João da Boa vista. — Place of recre-	
442	ation	485
	Jahú. — Municipal Chamber	488
443	Tauhaté. — The Cathedral	489
		491
444		493
	Dr Vicente Machado Governor of	
		494
445		495
		497
446		10.
		498
447		501
		502
110	" The Covernor's Palace	503
	y José Ranifraio Stroot	505
440	" Jose Doublacio Street,	505
		MOT
400	Cupituha The Cutholic Cethodoul	507
422.4		508
	» Charity Hospital	509
	» Presbyterial church , .	510
	» Police Darracks	511
- 1		
	regiment	512
	Curityba. — Asylum of N. D. da Luz for	
459		515
		517
		519
466		520
467	Grossa	521
470		523
472	Castro. — S. Paulo-Rio Grande Railway	
	bridge over the Yapó	525
473	Guarapuava. — Curucáca jump. Jordão	
	river	526
474	Florianopolis Monument to the pa-	
	triotic volunteers in the Public Garden	528
	Strait of the isle of S. Catharina and for	
476	S. Cruz	529
477	Florianopolis Panoramic view of the	
478		532
	Florianopolis. — State Governors' Pa-	
479		533
	Florianopolis. — Da Santa Casa Hospi-	
481	tal and beach of sacco dos linóes	534
	Florianopolis. — Cathedral	535
482		
		536
483	Florianopolis. — Esteves Junior street	537
	440 442 443 444 445 446 447 448 449 450 451 453 454 453 454 453 456 457 459 460 461 466 467 470 472 473 474 476 477 478 479 481 482	city and port

•	6
1	~

Biumeneau. — Gigantic paim tree,	Bello Horizonte. — The Law-school .	587
palms 9 metres long	Minas. — The great Falls of Tombos	
Blomeneau Monicipal chamber 540	de Carangola on the frontier of Minas	
Laguna. — Panorama of a part of the	and Rio	588
city 542	Caxambú. — View of a part of the City	591
Dr Blumeneau Founder of the city	Ouro Preto to-day. — Monument of Ti-	120
of that name	radentes in the Square of the same	
Dr. Borges de Medeiros. — Present	name, and the old prison (rebuilt).	595
Governor of Rio Grande do Sul 547	Ouro Preto to-day. — S. José Street and	900
Gaucho Costume	the « easa dos contos » on the back-	
Porto Alegre. — Isle of Pedras Brancas	ground	594
and powder magazine	Old Ouro Preto. — The Thomas Gon-	+3274
Porto Alegre. — Lower part of the city 551	zago house, in the middle of the 18th	
» Municipal building 552		598
» 7 Setembro street	Century	990
» School of Civil Engineers,		
Arts and manufactures	tain in the 18th Century, leaned	8100
	against the Marilia House	590
Porto Alegre. — Julio de Castilhos	Old Ouro Preto. — The house where	***
place	Marilia de Dirceu died	597
Porto Alegre. — Santa Casa da Miseri-	Juiz de Fóra. — Jury-House and Public	***
córdia hospital	Prison	598
Pelotas. — View of a part of the city . 561	Iniz de Fóra. — Textile Fabric « Mas-	
» View of a Beef Factory 562	earenhas »	599
» Da Misericordia hospital 565	Uberaba. — Santa Casa de Misericor-	
Rio Grande. — Marechal Floriano street 564	dia (Hospital)	600
» Municipality's square 565	Uberaba. — The municipal House	601
Dr. João Pinheiro. — Governor of the	» Catholie church	602
State of Minas Geraes	Panoramic view of the city S. João del	
Bello Horizonte. — Paraopeba Avenue. 572	rey	603
Building of Economic	S. João del Rey. — S. Francisco church	604
bank and Treasory Delegation 575	City of Barbacena	606
Bello Horizonte. — Minas Station, of	Barbacena. — Pomologic garden and	
the Estrada de Ferro Central 575	House of Dr. Rodolpho Abreu	607
A defile of the Serra do Curral on the	Panoramie view of the City of Sabará.	608
way to Ouro Preto 576	Cataguazes. — Credito Real of Minas-	
Bello Horizonte. — Senate House 577	Geraes Bank's Agency	609
» ' » Governor's Palace . , 579	Cataguazes. — Forum building	610
» » Home department and	Panoramic view of the city of Passos .	611
Revenue	Cataguazes. — Forum building	613
Bello llorizonte. — Agricultore Palace 581	Cuyabá. — S. Gonçalo church	614
» » Barracks of the Public	» Harbour and Landingstage .	615
Force 582	Goyaz. — Suburbs of the City and	
Bello Horizonte. — Public market 584	Market	621
» » Front view of the Minas	Goyaz. — Abbadin Street	623
Gymnasium	» · Bridge over the Rio Vermelho .	625
Ojimandii,	. minge over the movermento.	020









1303

HSAm D541b 320663 The Brazil of to-day. Author Dias, Arthur

PORROWER.

University of Teronto Library

DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET

Acme Library Card Pocket LOWE-MARTIN CO. LIMITED

